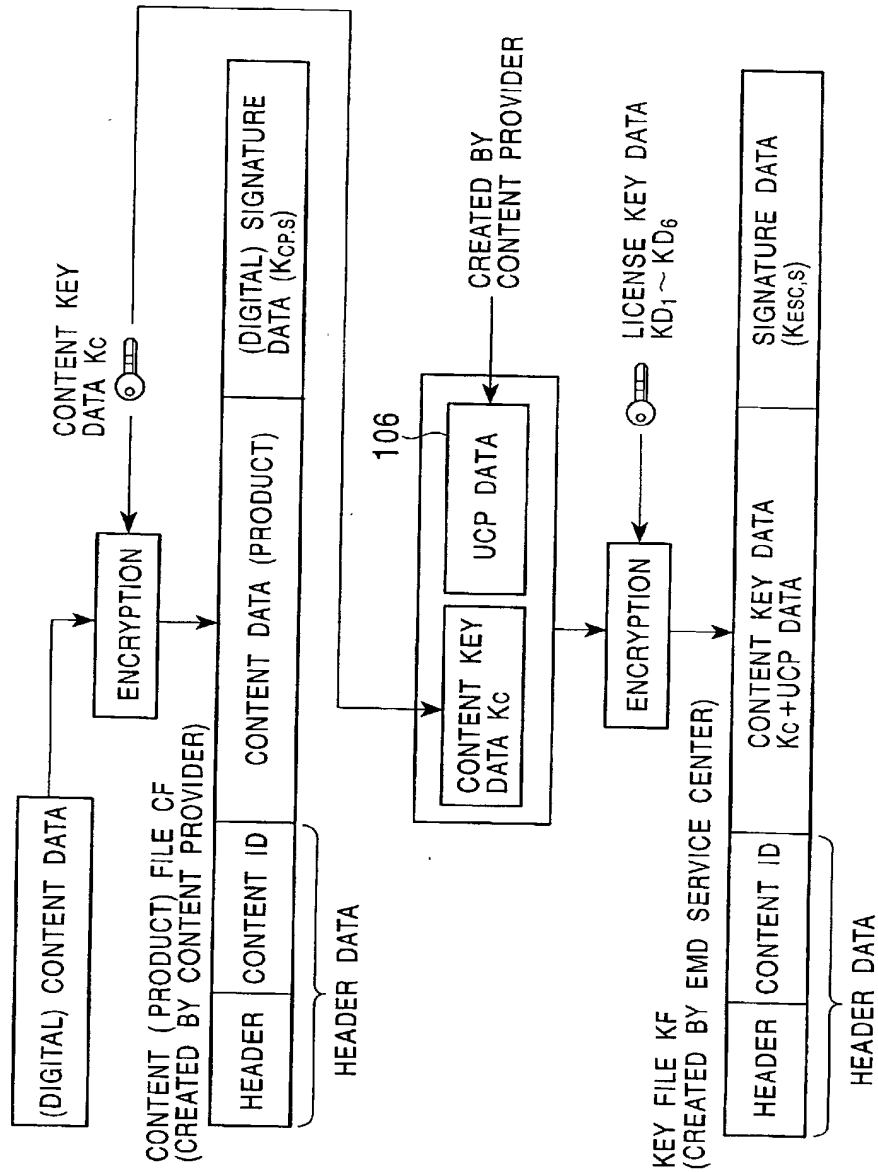


FIG. 2



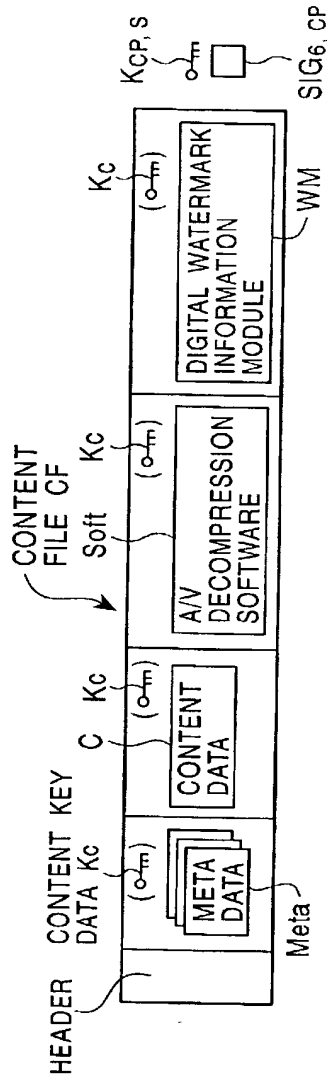


FIG. 3A

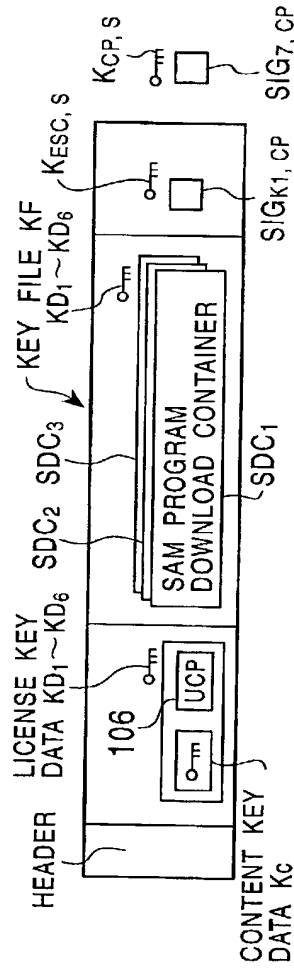


FIG. 3B

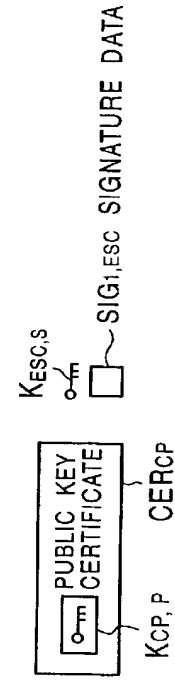


FIG. 3C

FIG. 4

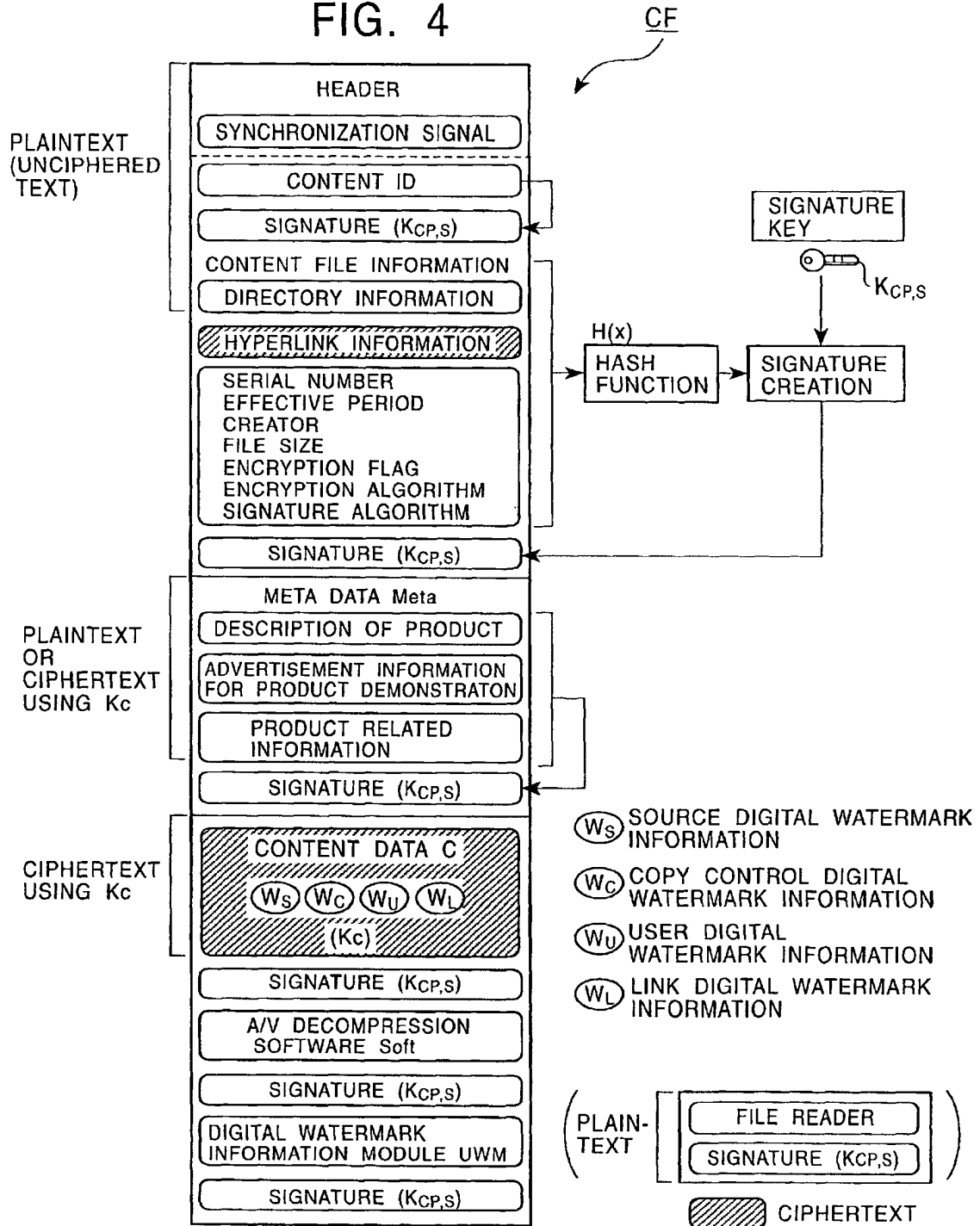


FIG. 5

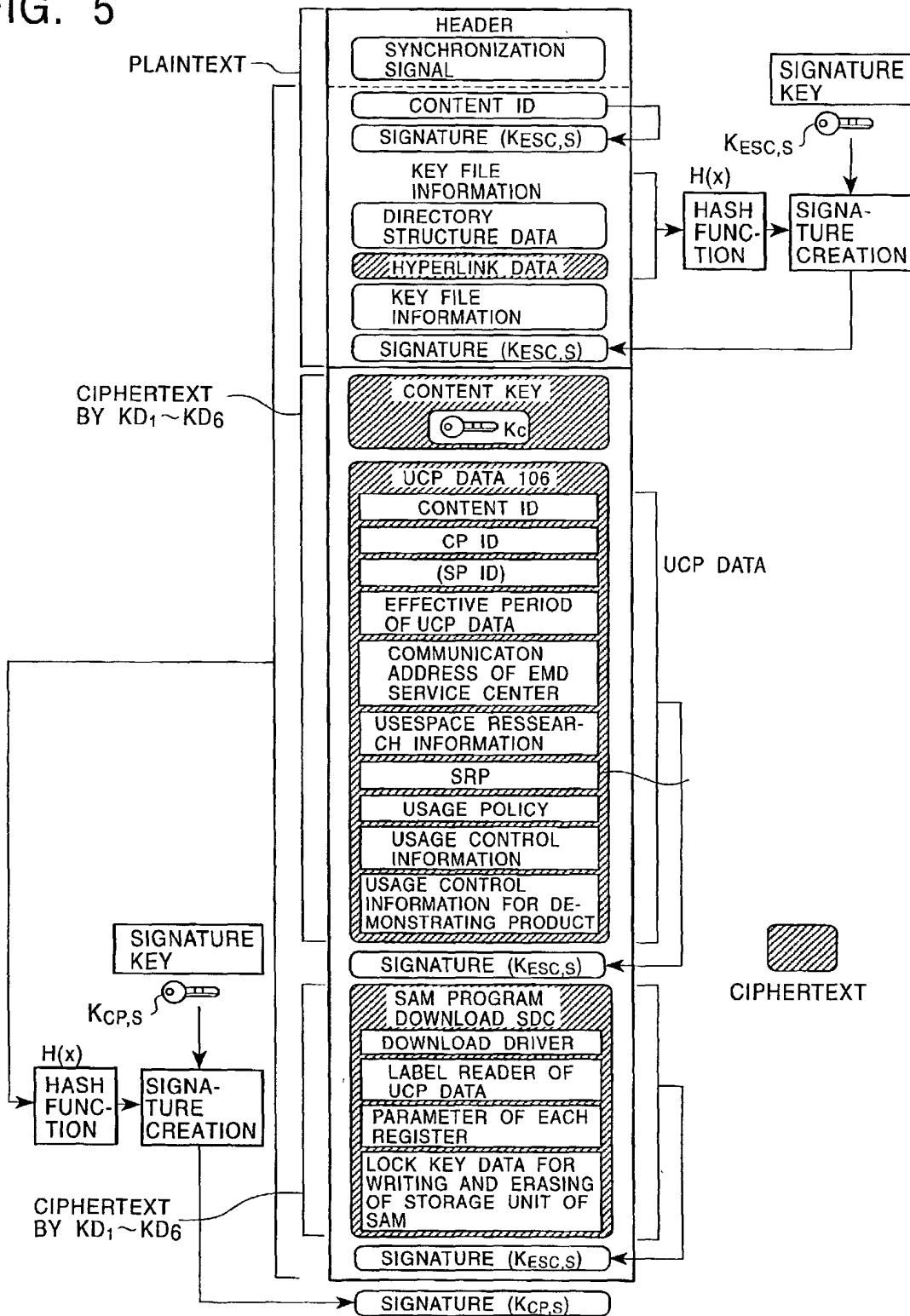


FIG. 6

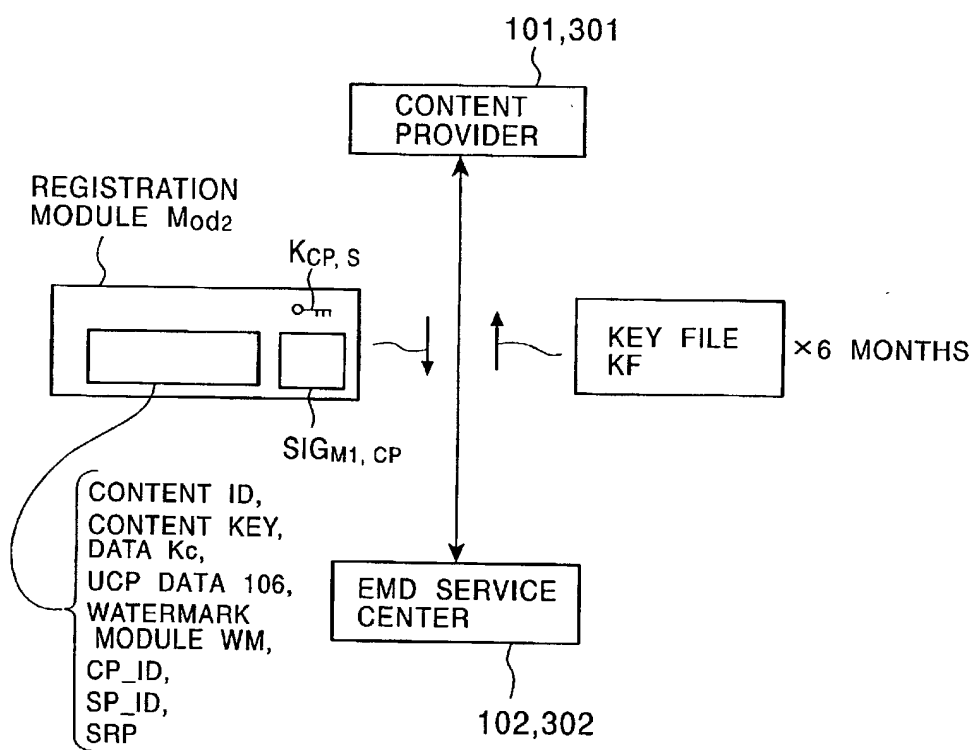


FIG. 7

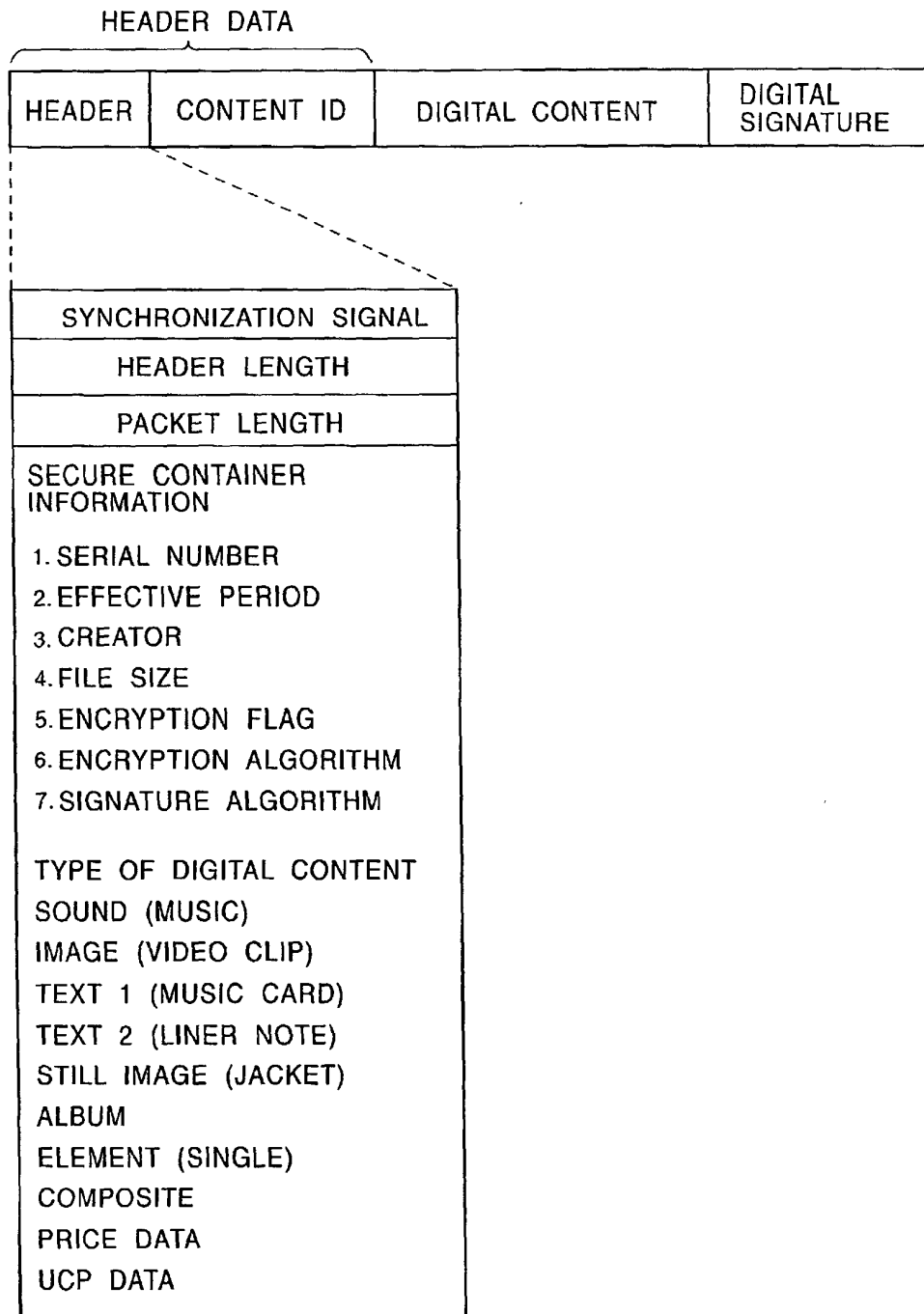


FIG. 8

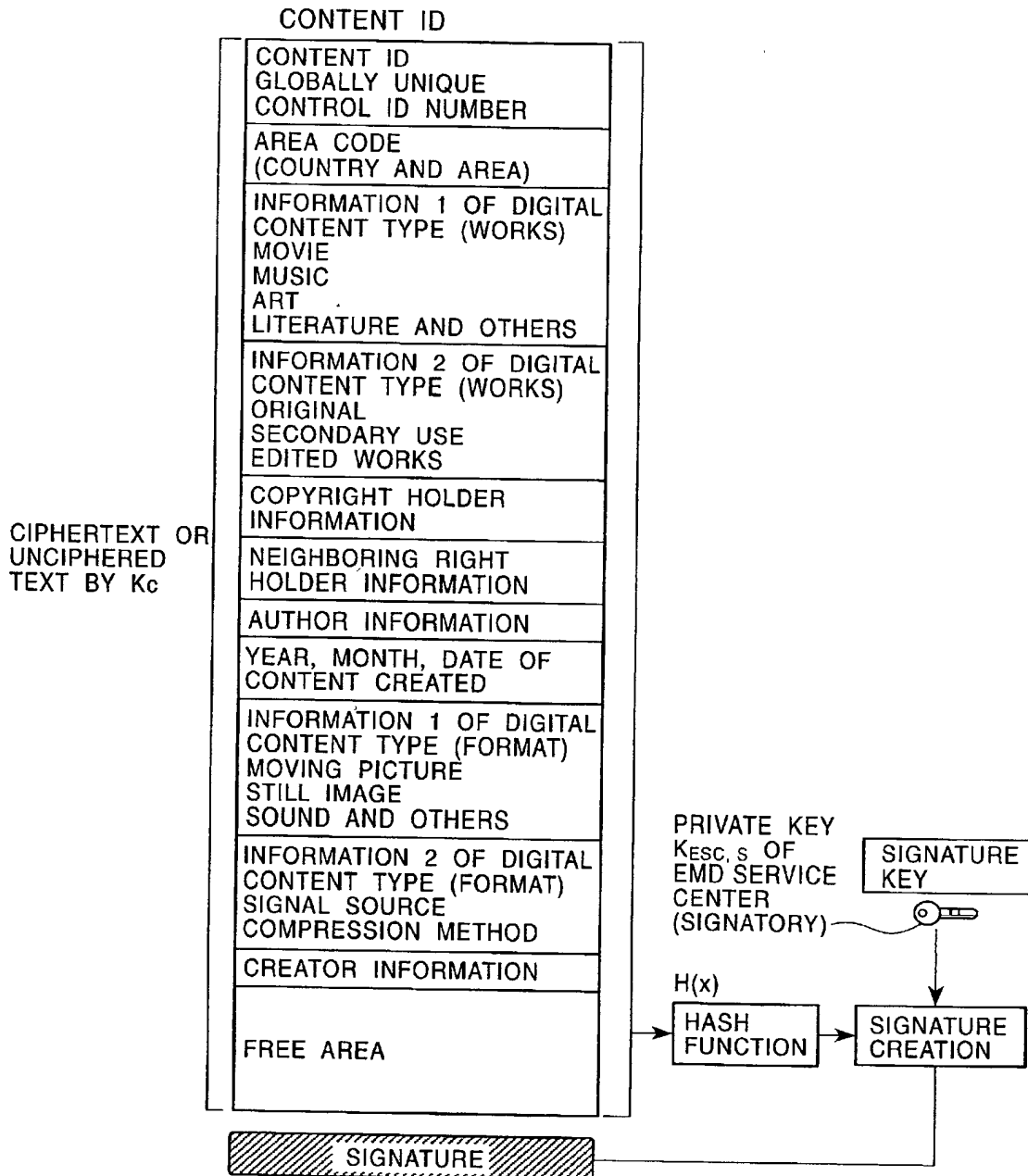


FIG. 9

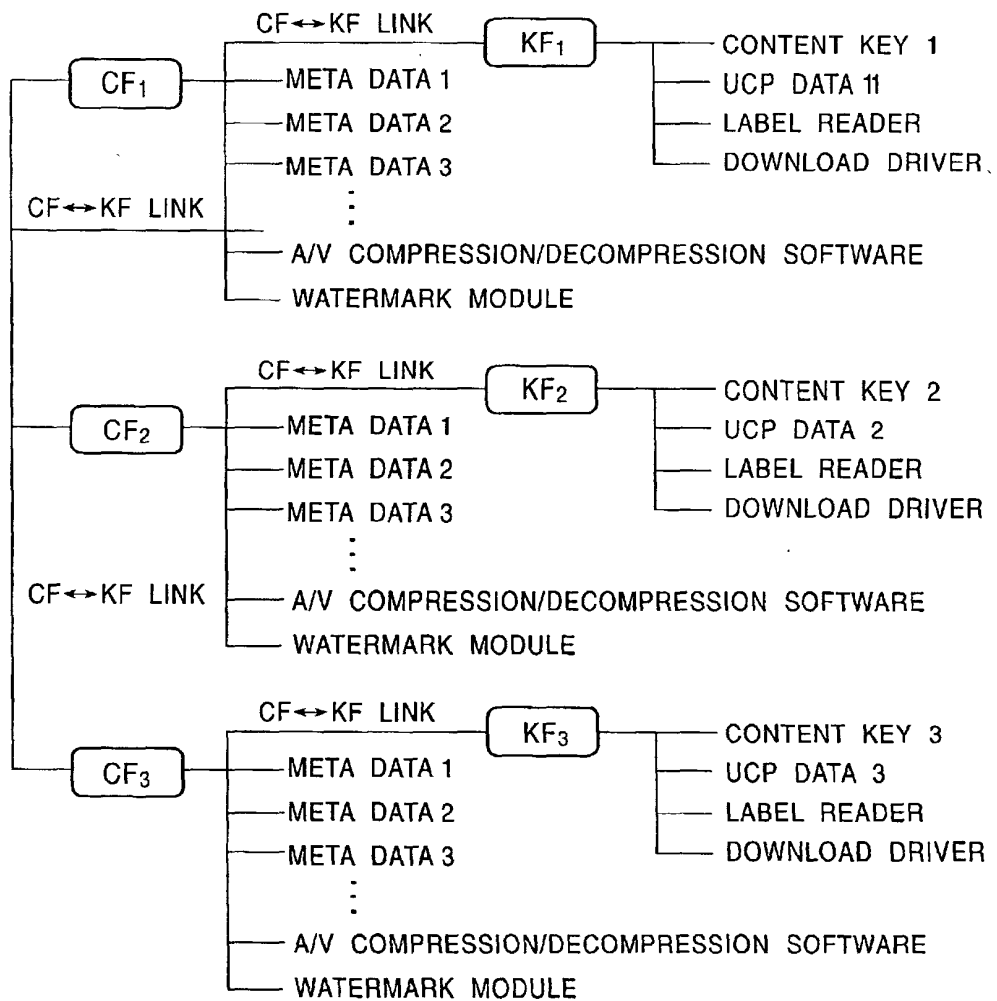


FIG. 10

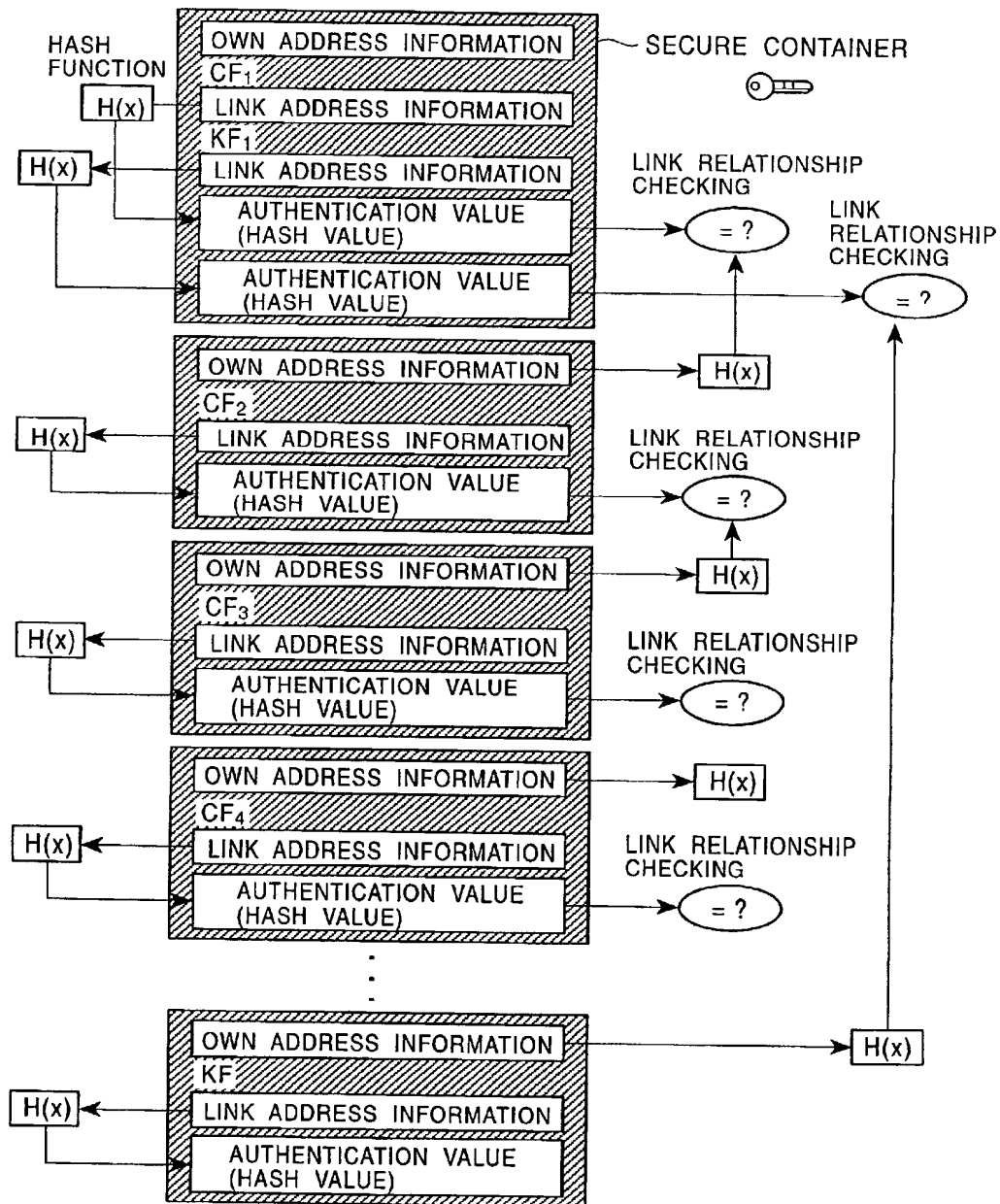


FIG. 11

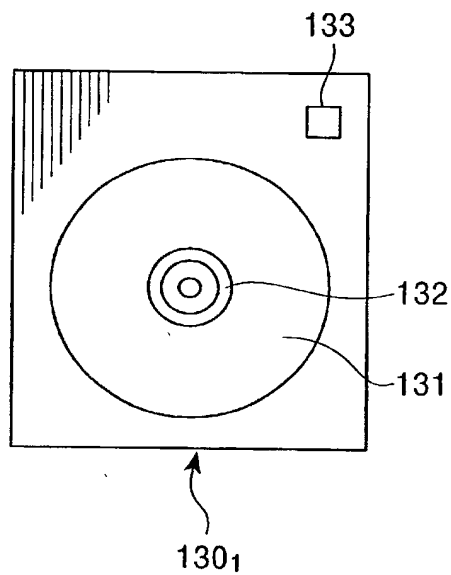


FIG. 12

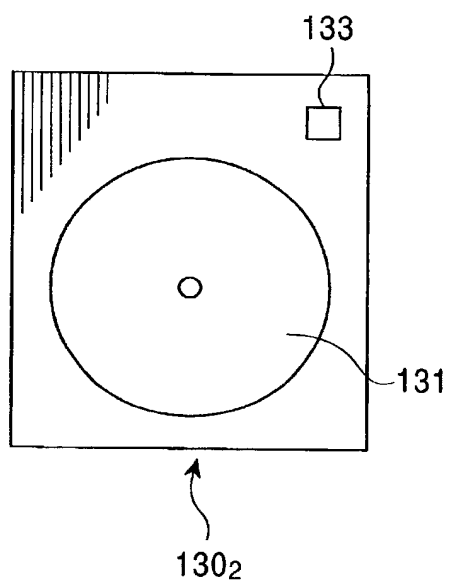


FIG. 13

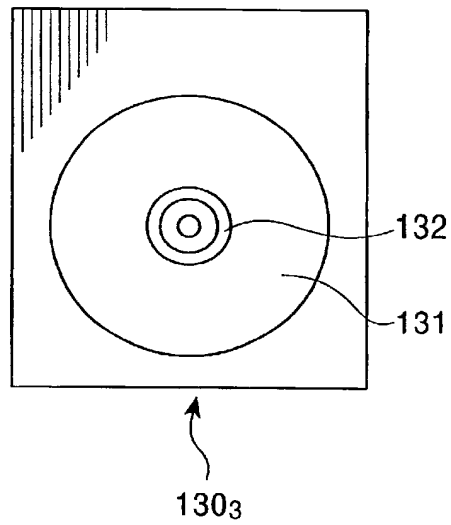


FIG. 14

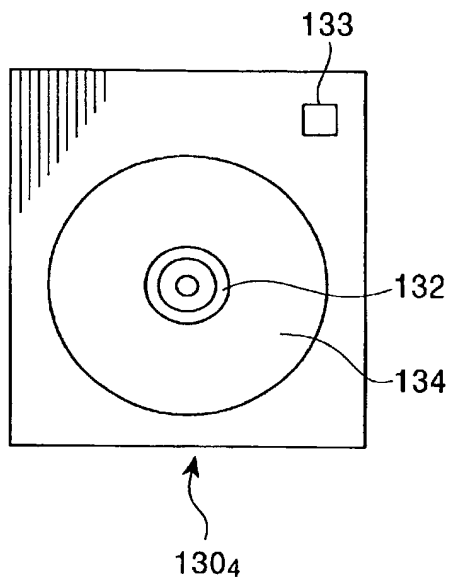


FIG. 15

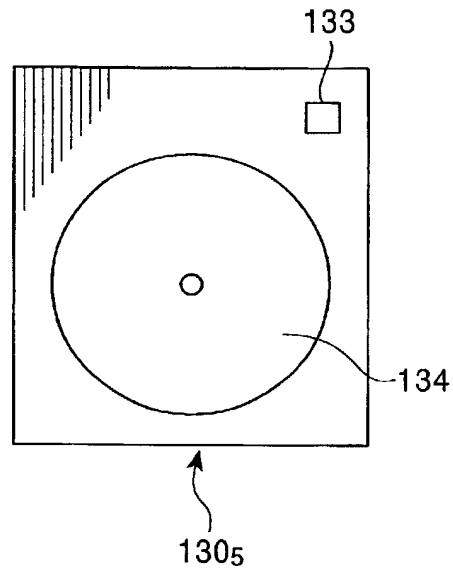


FIG. 16

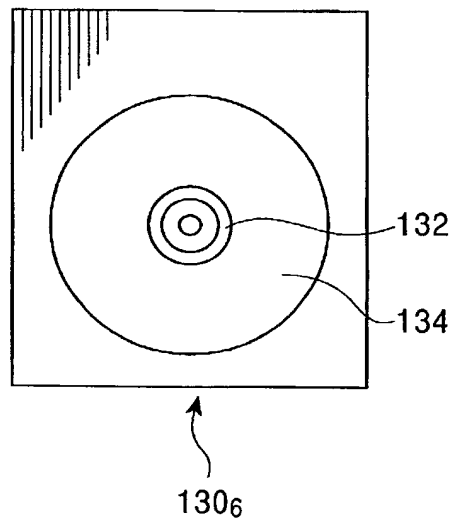


FIG. 17

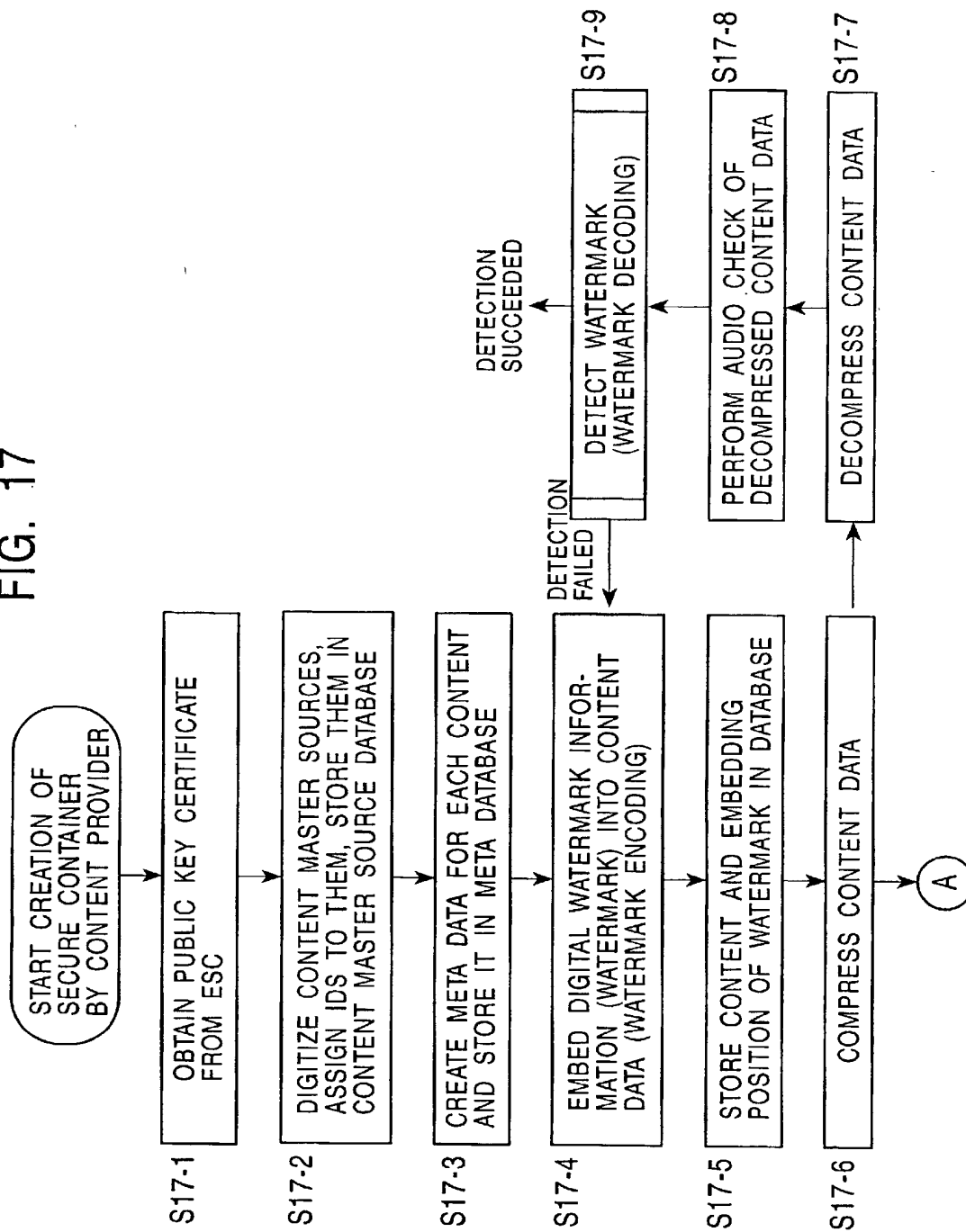


FIG. 18

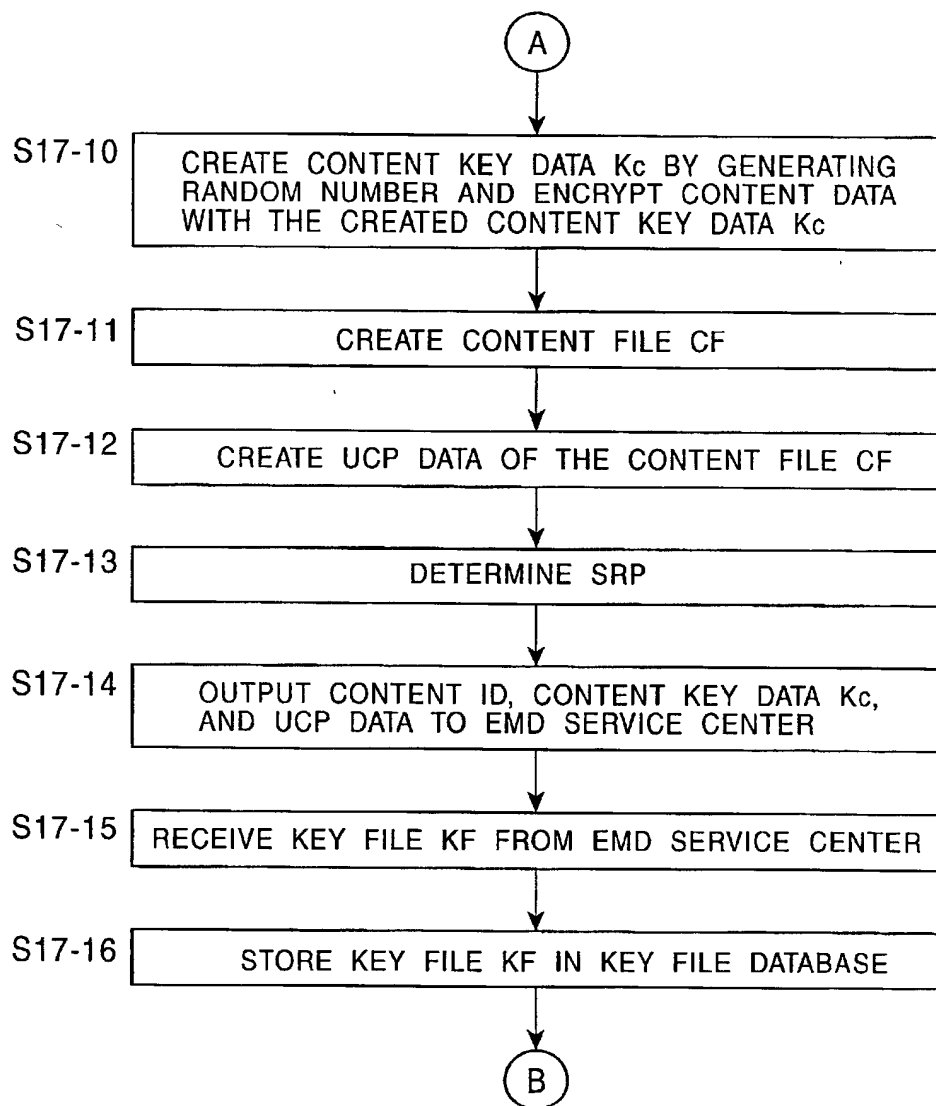


FIG. 19

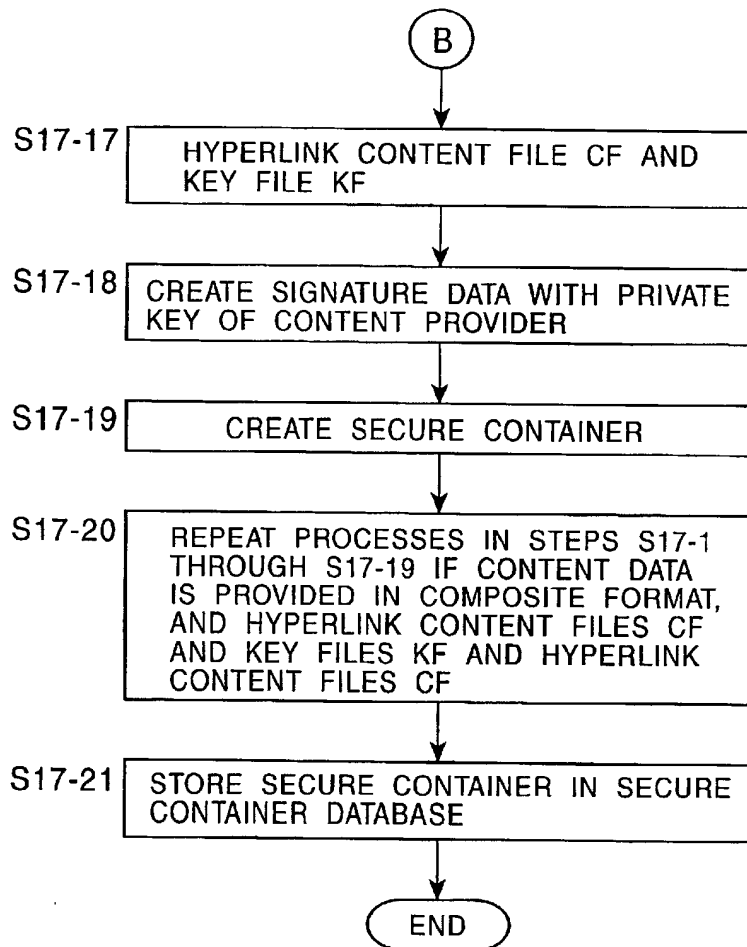


FIG. 20

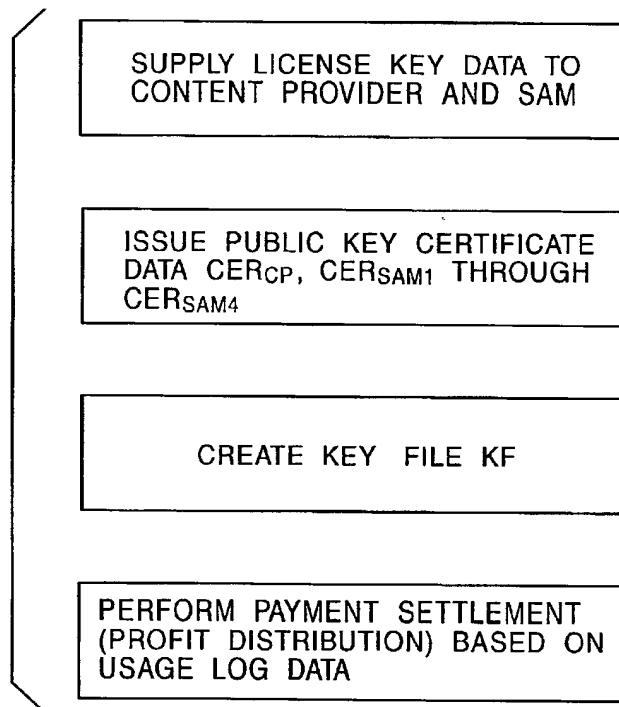


FIG. 21

ESC_CONTENT ID
CP_CONTENT ID
(SP_CONTENT ID)
USER ID
USER INFORMATION
SAM_ID
HNG_ID
DISCOUNT INFORMATION
TRACING INFORMATION
(PRICE DATA PT)
CP_ID
(SP_ID)
SERVICE PROVIDER (PORTAL) ID
HARDWARE PROVIDER
MEDIA_ID
COMPONENT ID
IDENTIFIER OF LICENSE OWNER LH_ID
ESC_ID

FIG. 22

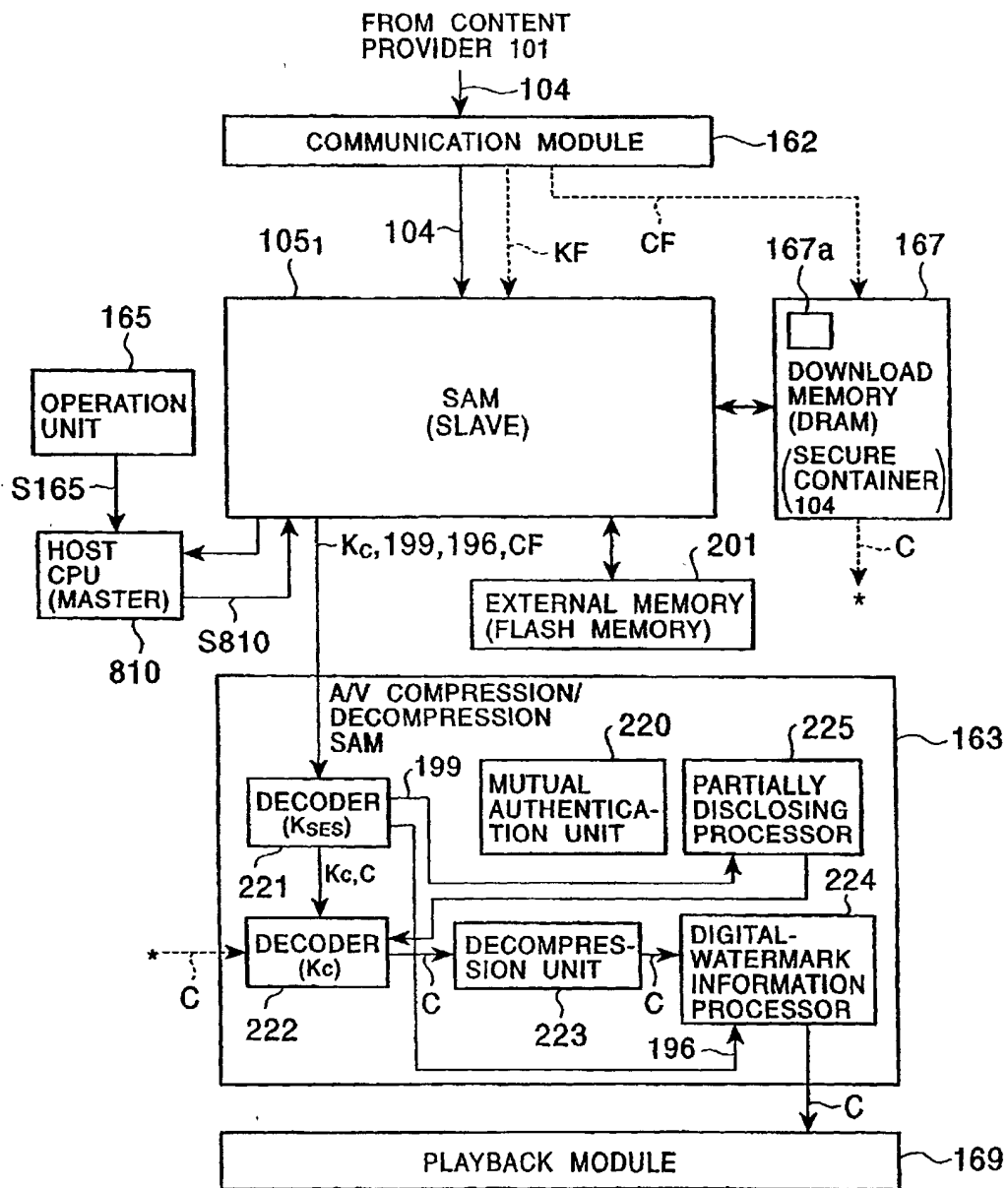


FIG. 24

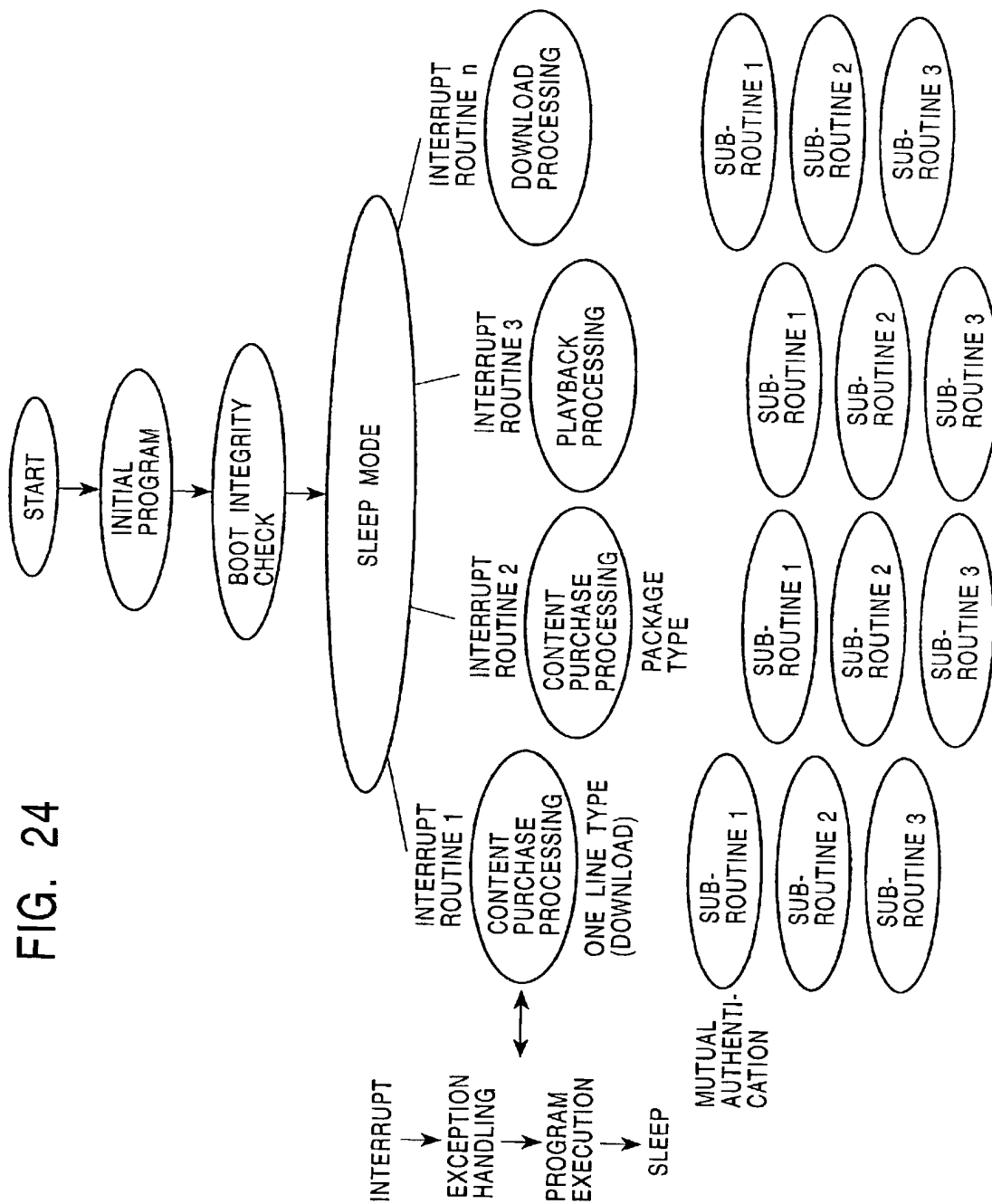


FIG. 25

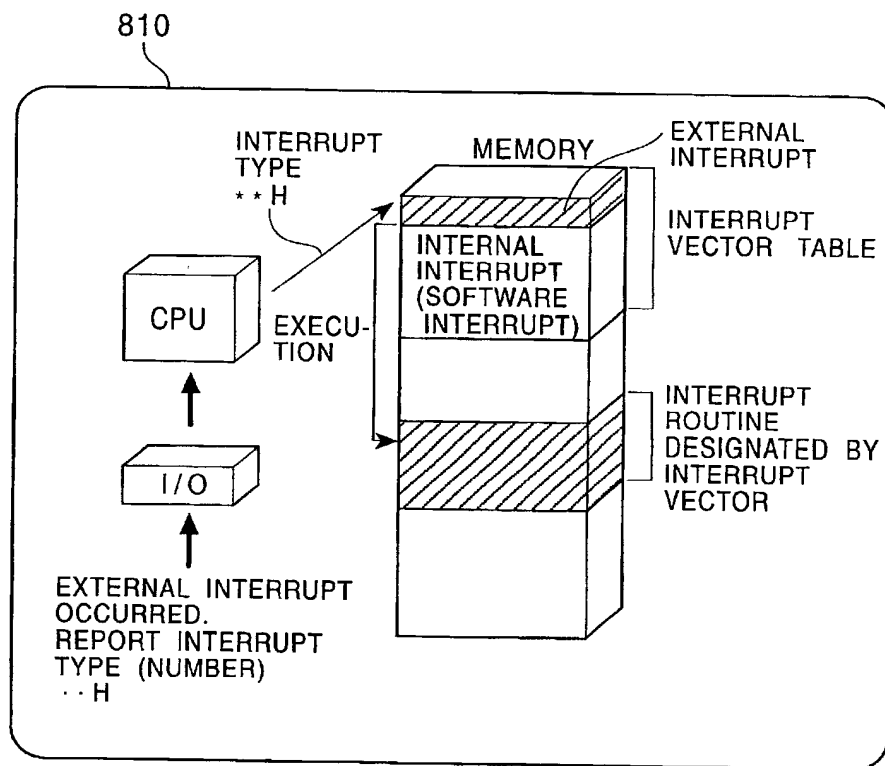


FIG. 26

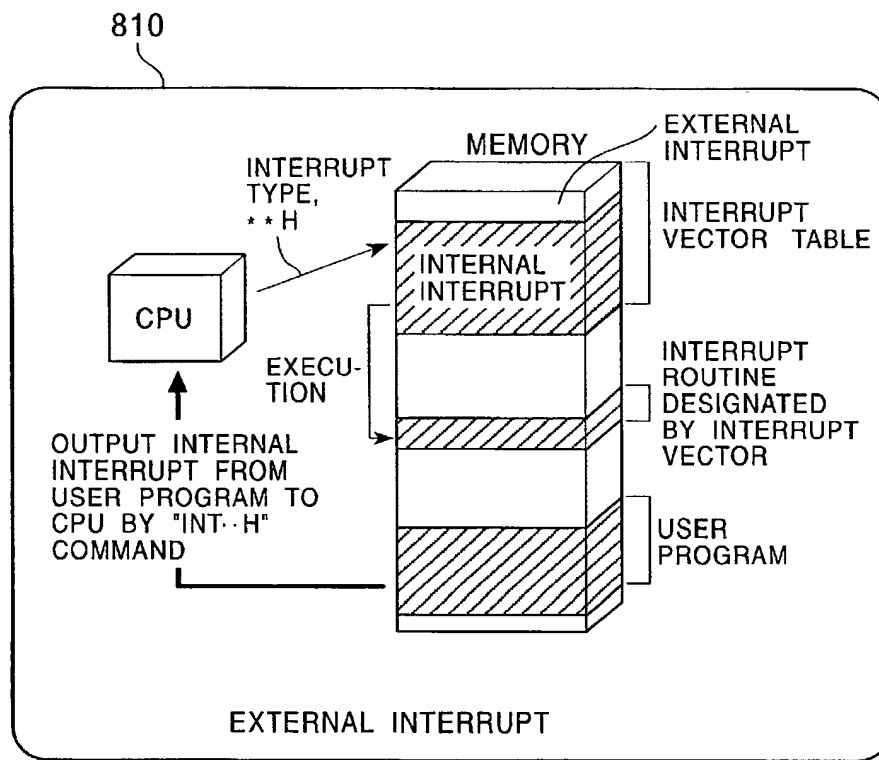


FIG. 27

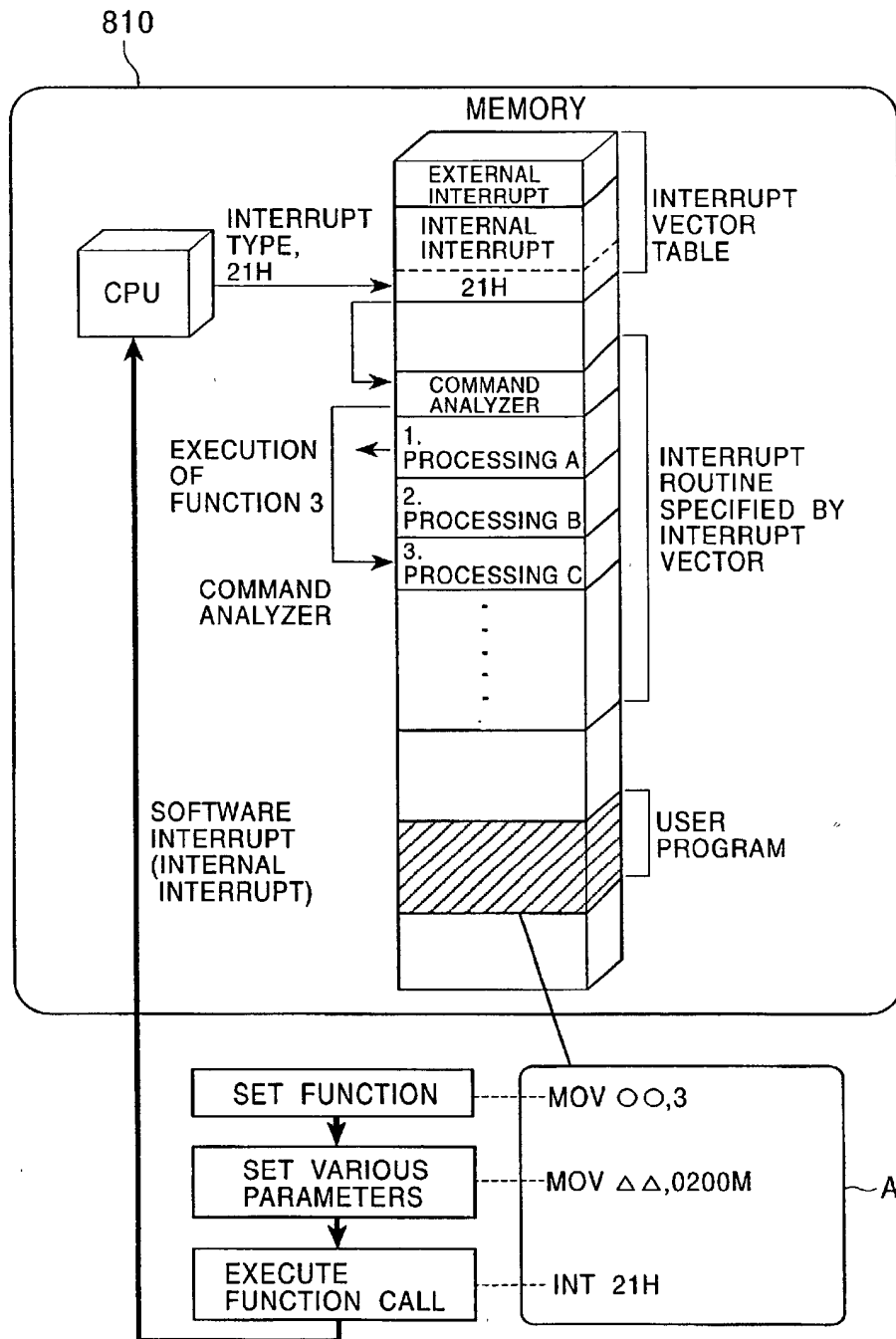


FIG. 28

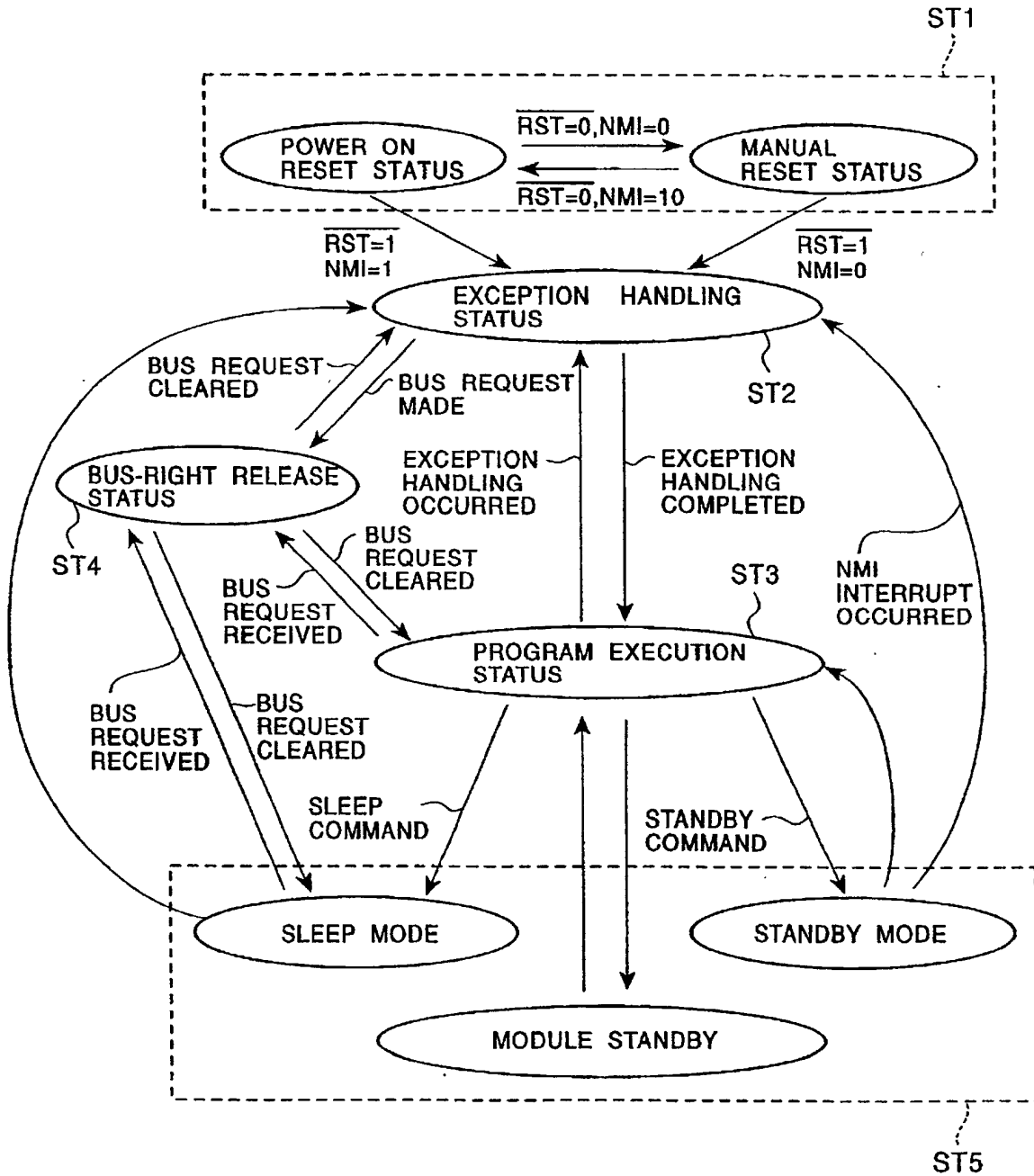


FIG. 29

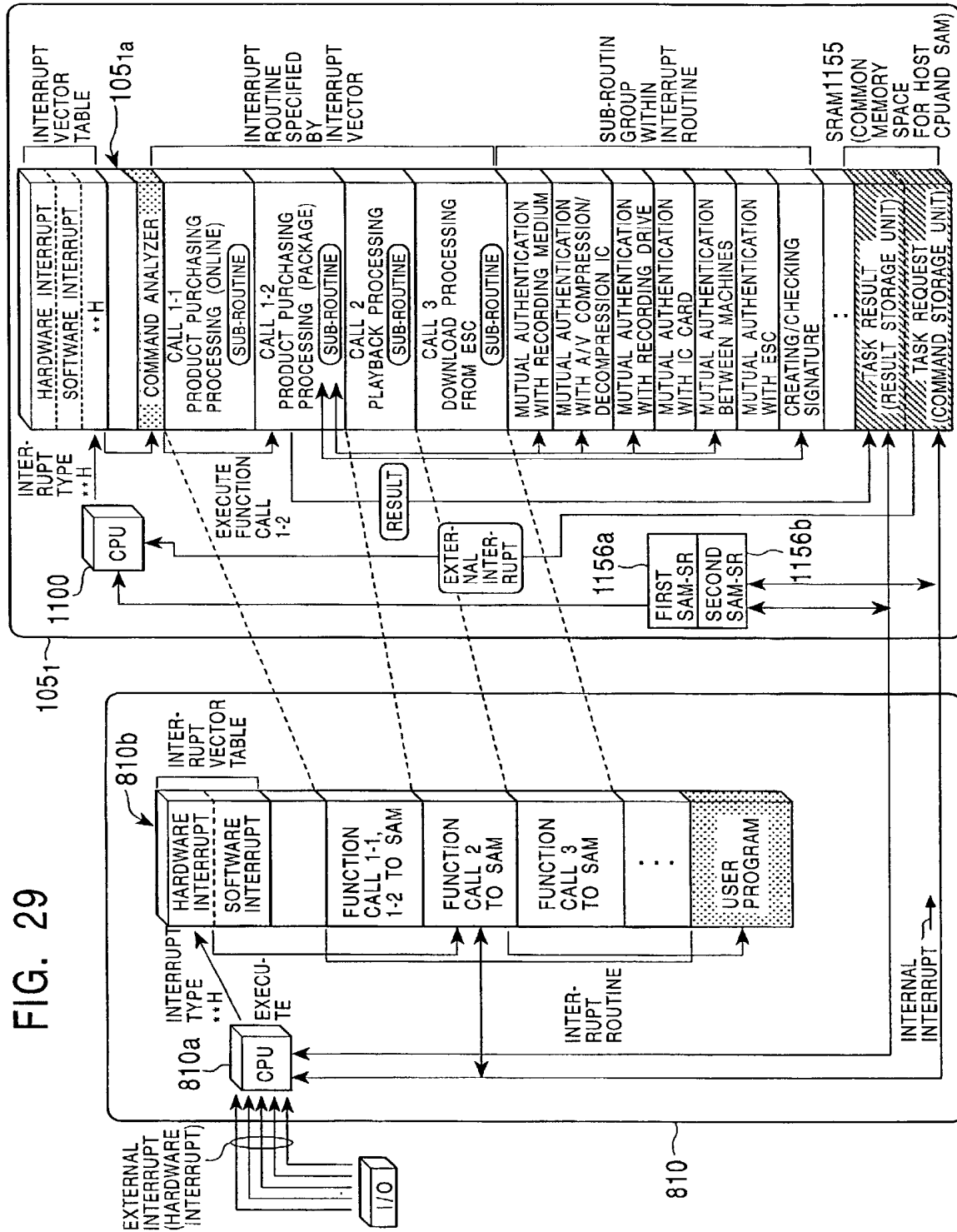


FIG. 30

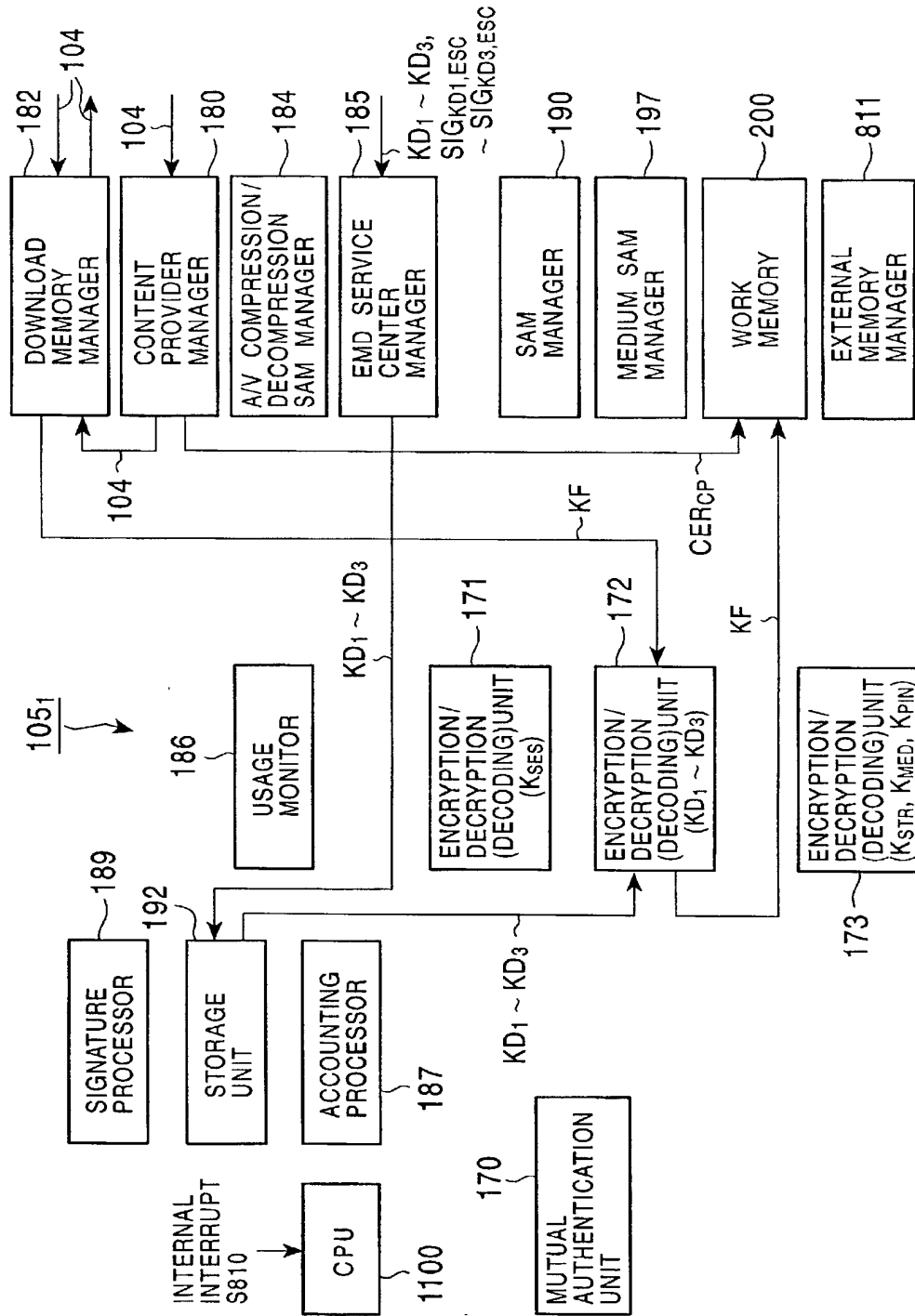


FIG.32

SAM REGISTRATION LIST

CONTENT KEY DATA Kc

LOCK KEY DATA K_{LOC} OF STORAGE UNIT 192

PUBLIC KEY CERTIFICATE CER_{CP} OF CONTENT PROVIDER

UCS DATA 166

SAM PROGRAM DOWNLOAD CONTAINERS SDC₁~SDC₃

FIG. 33

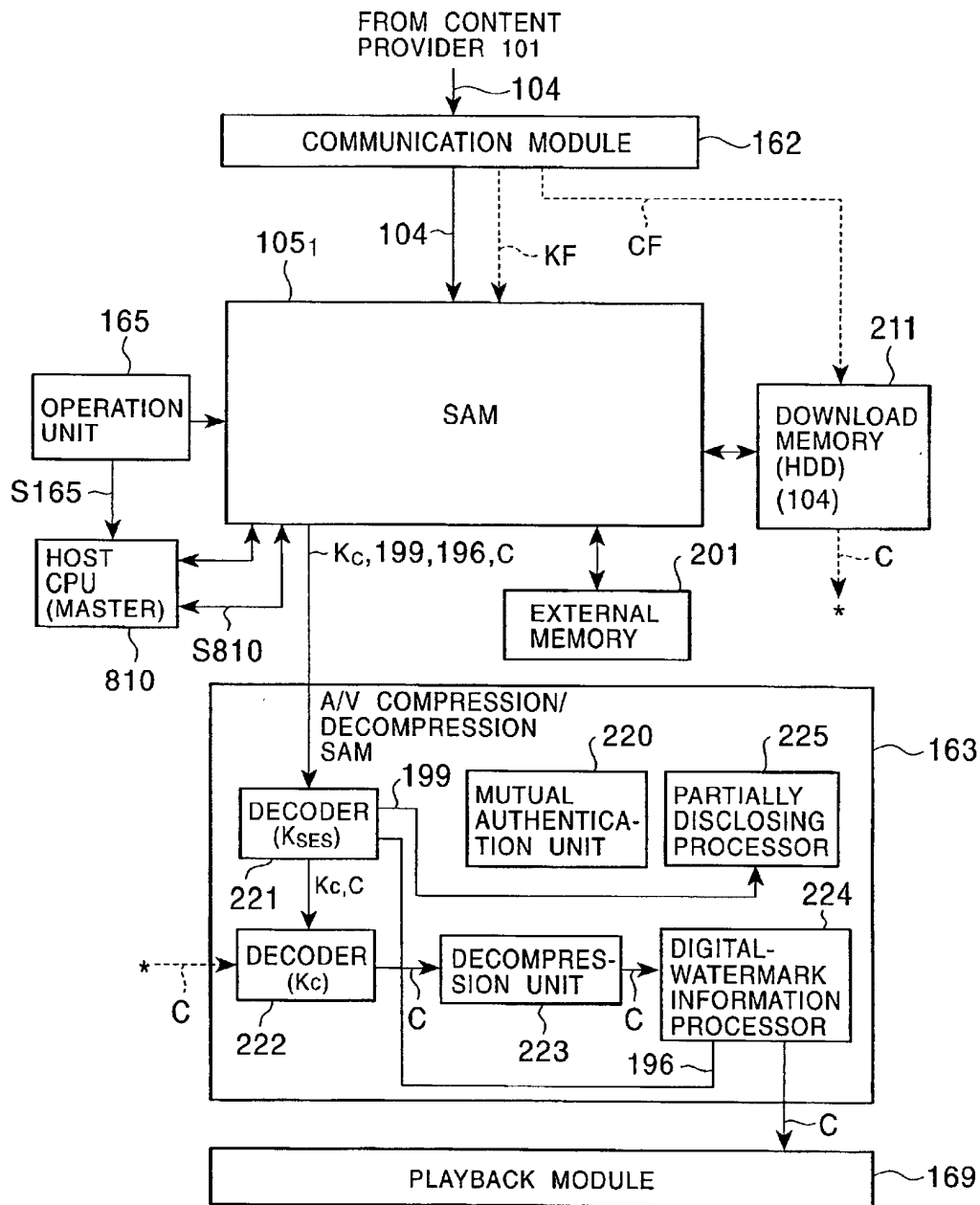


FIG. 34

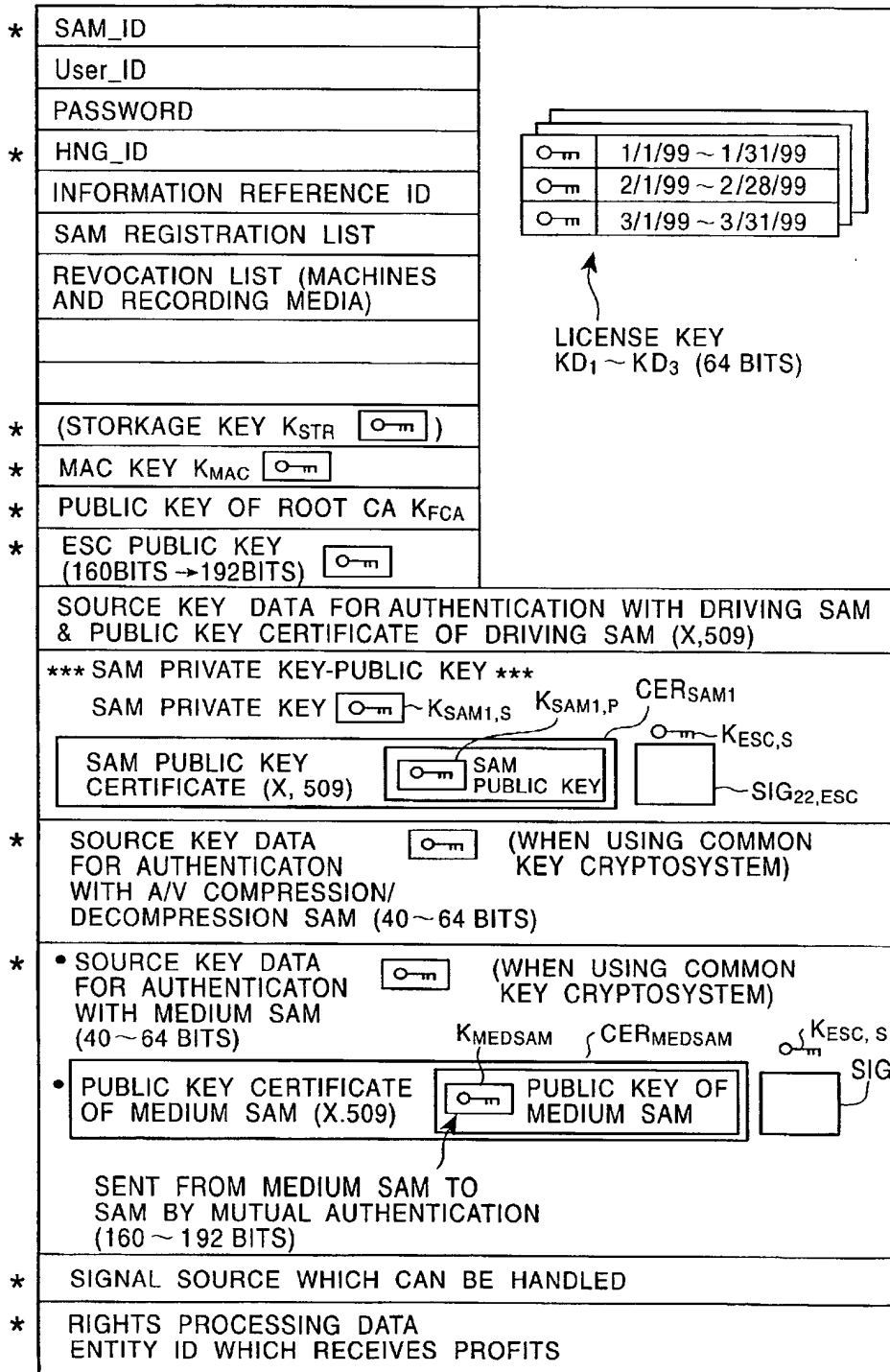


FIG. 35

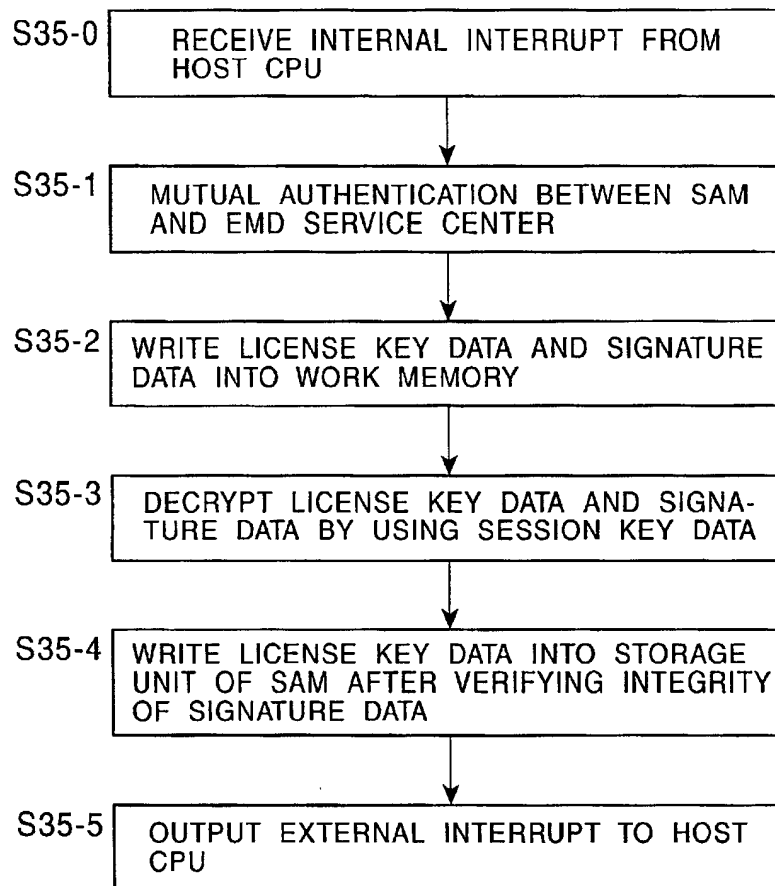
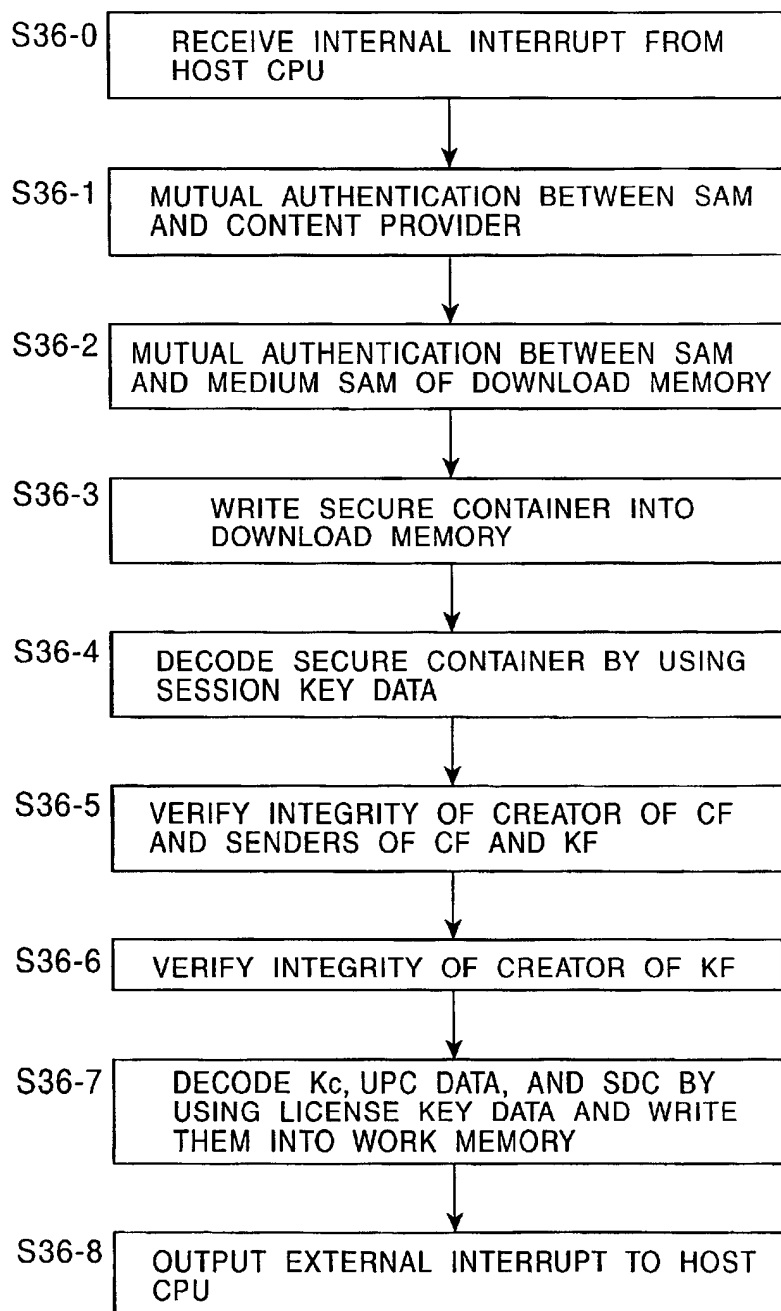
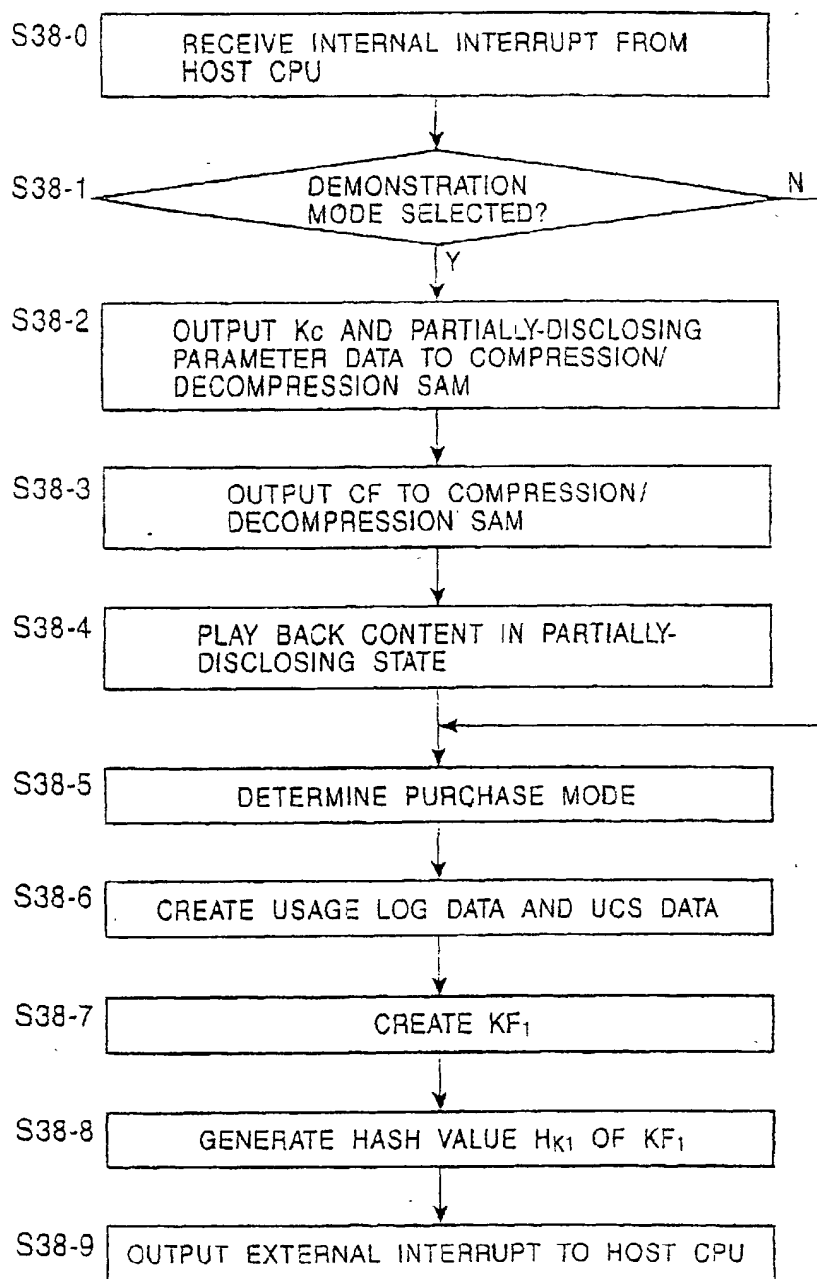


FIG. 36



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FIG. 38



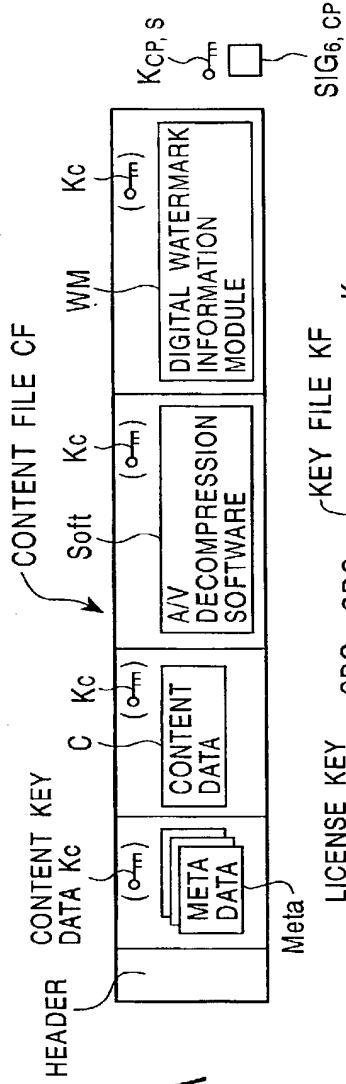


FIG. 39A

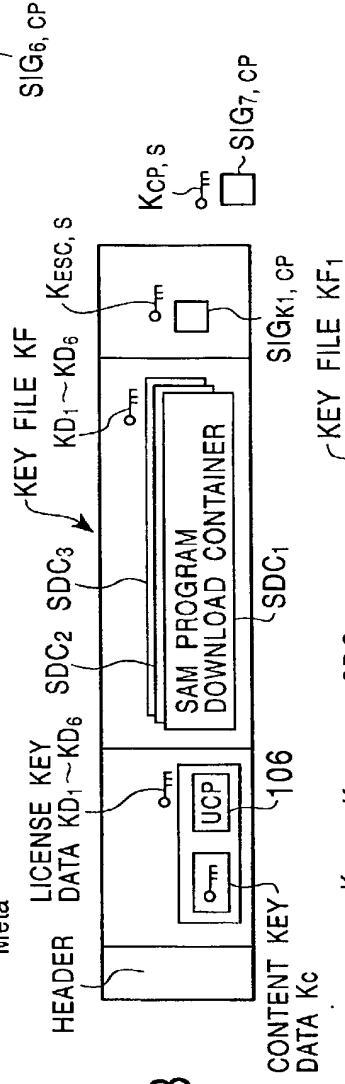


FIG. 39B

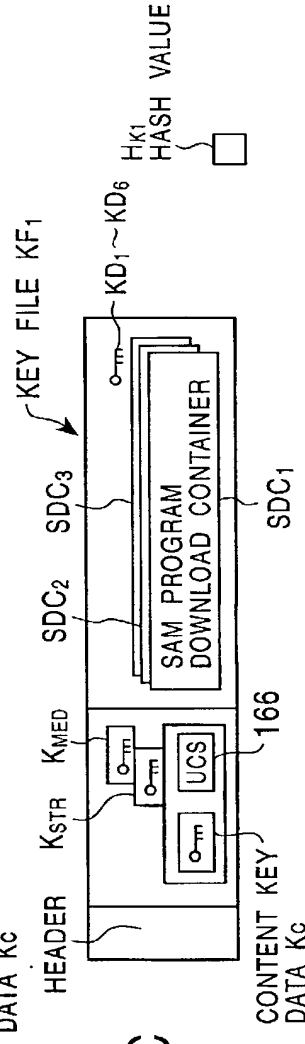


FIG. 39C

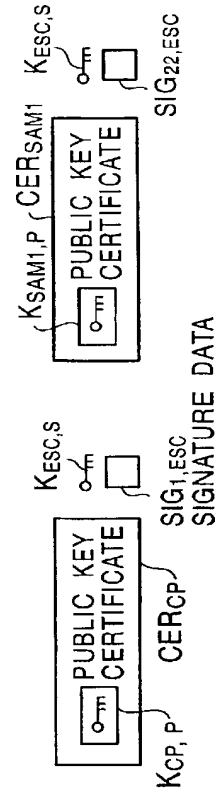


FIG. 39D

FIG. 40

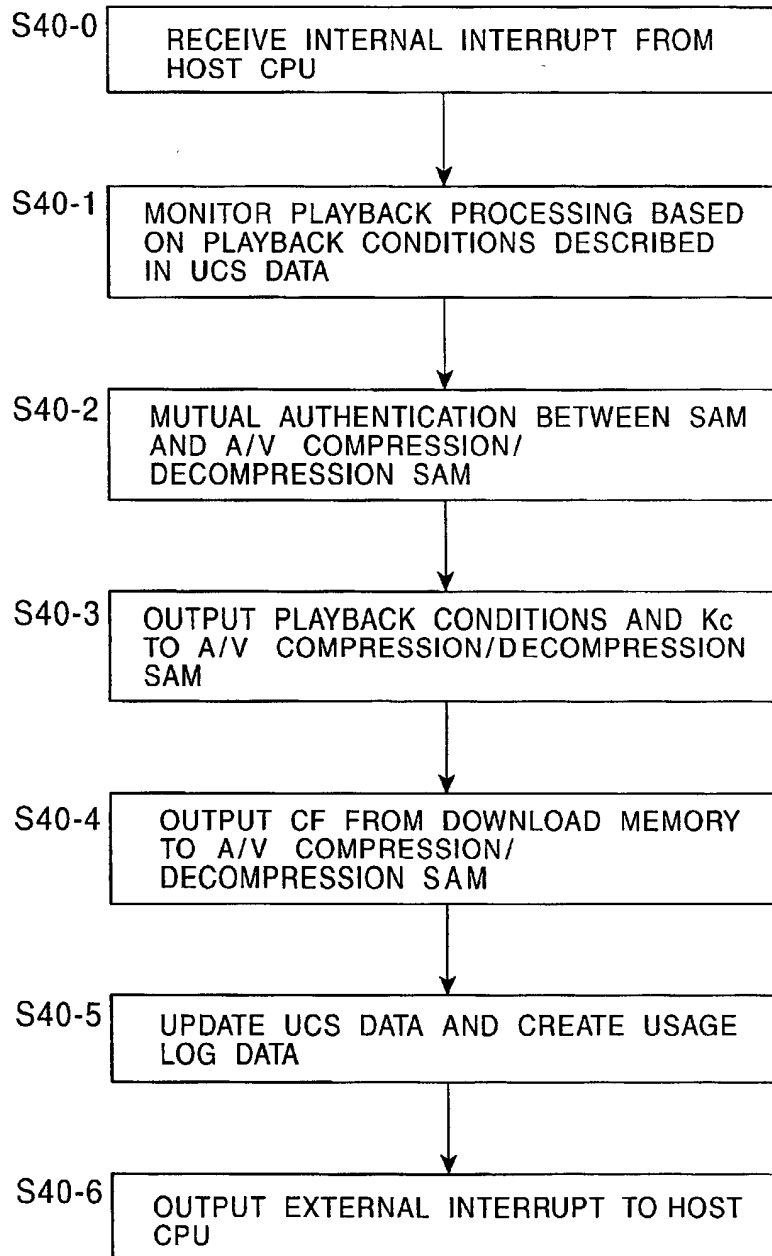


FIG. 41

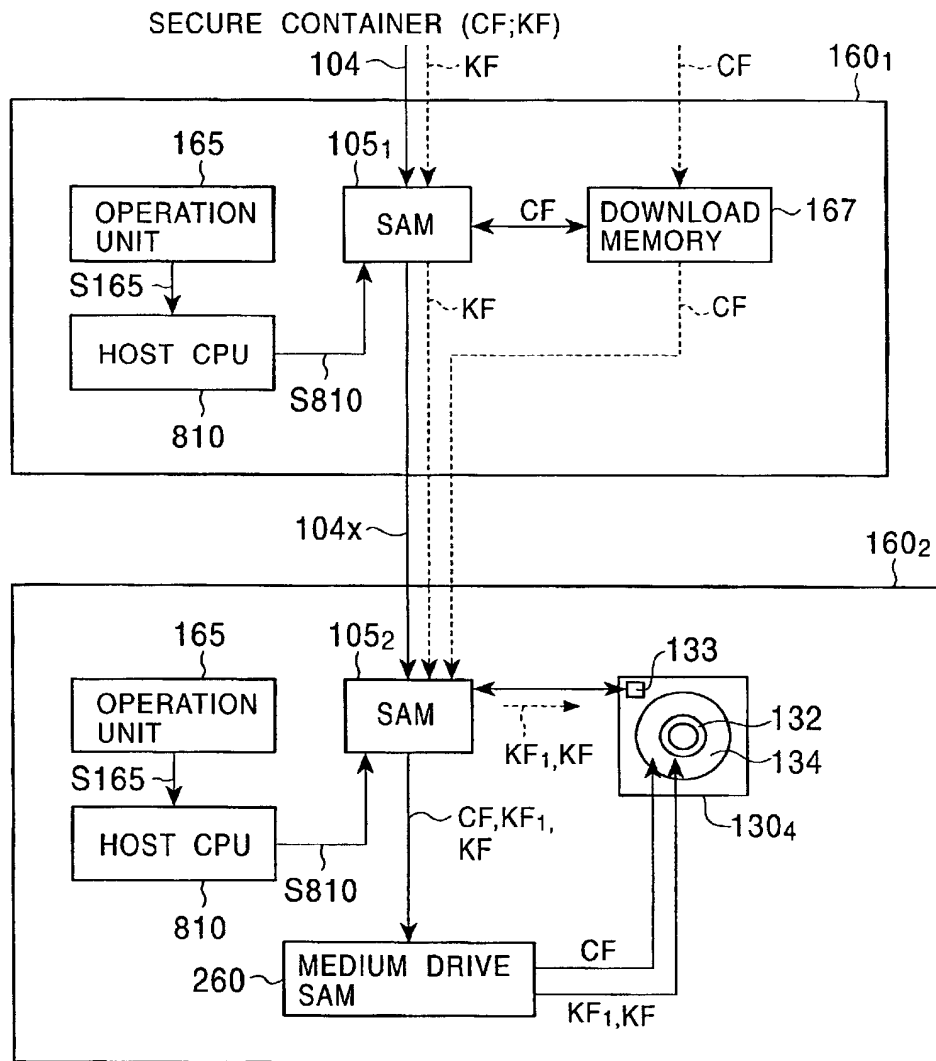


FIG. 42

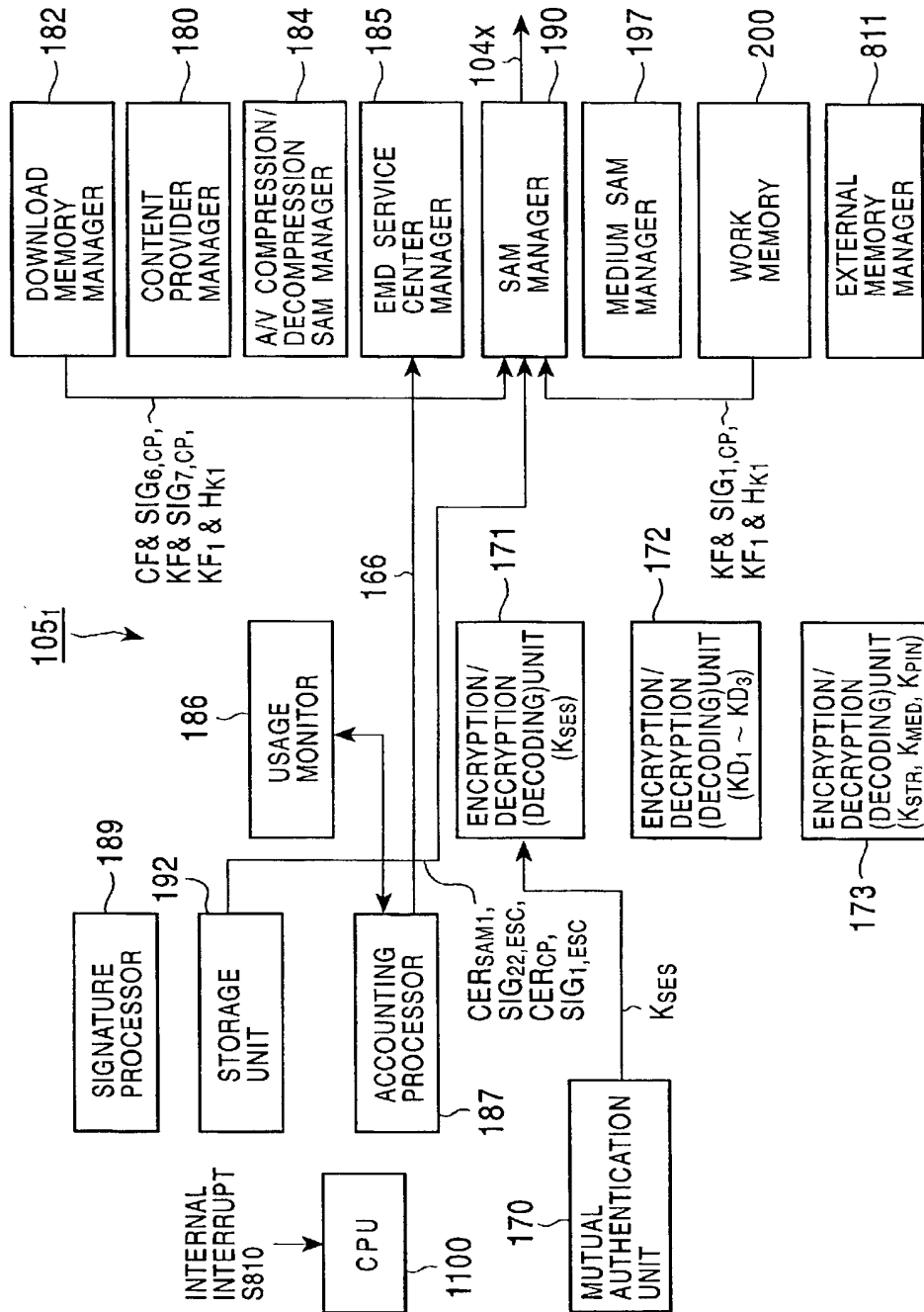
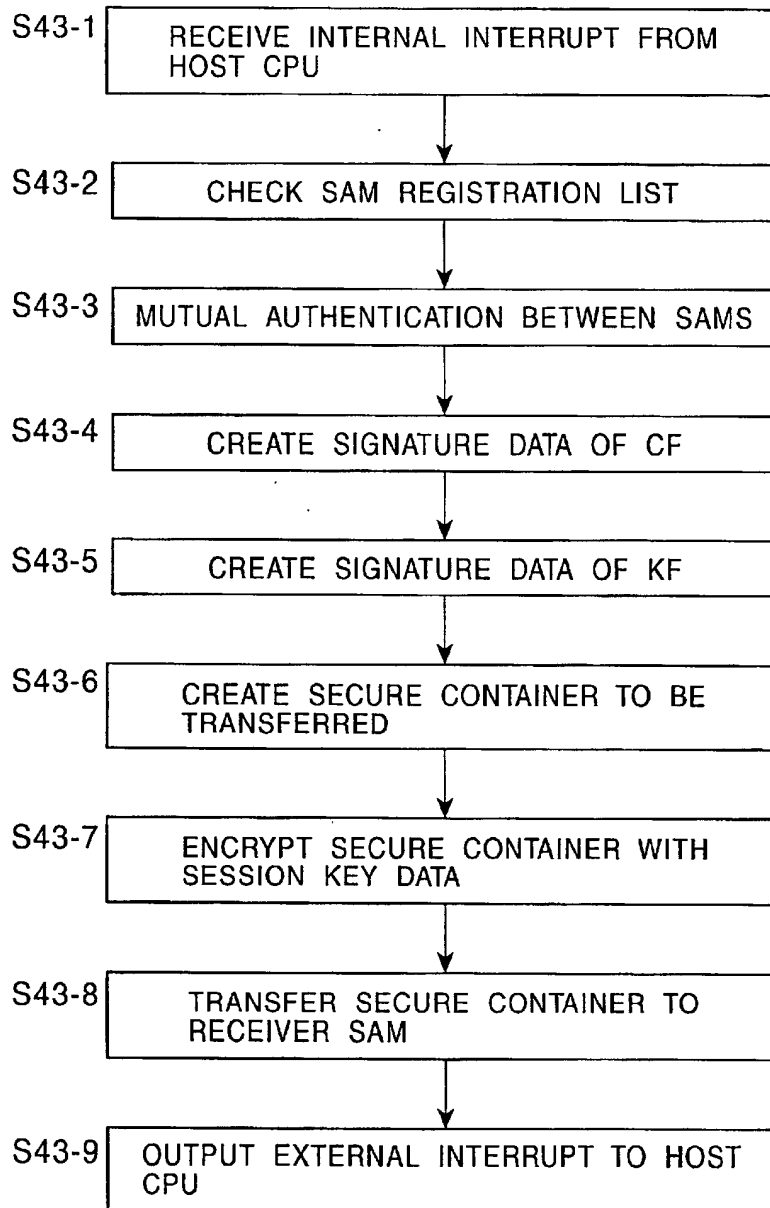


FIG. 43



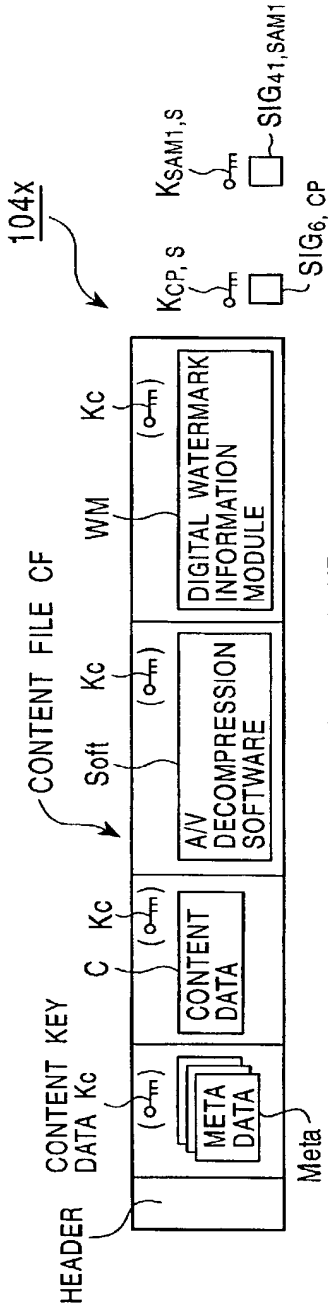


FIG. 44A

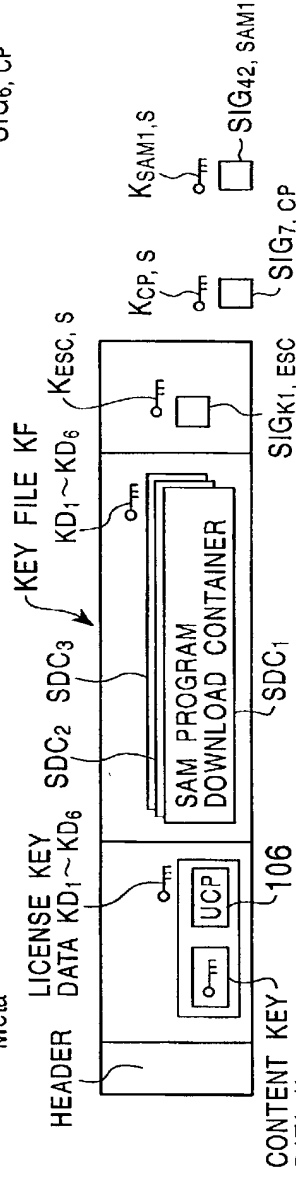


FIG. 44B

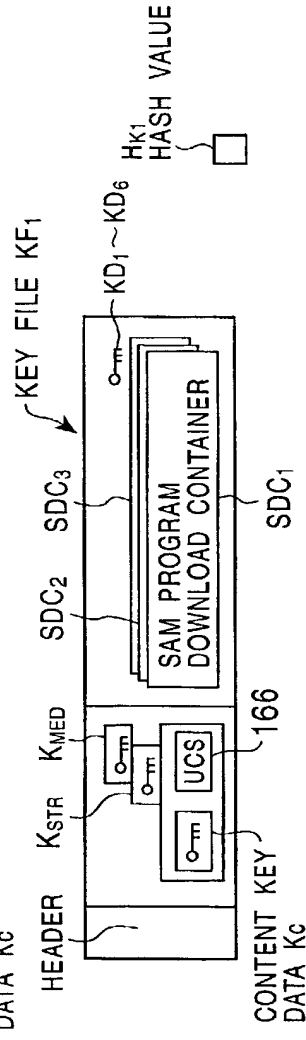


FIG. 44C

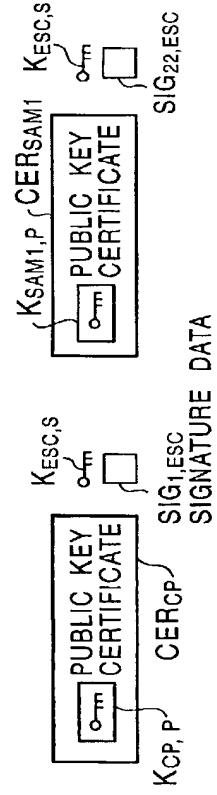


FIG. 44D

FIG. 46

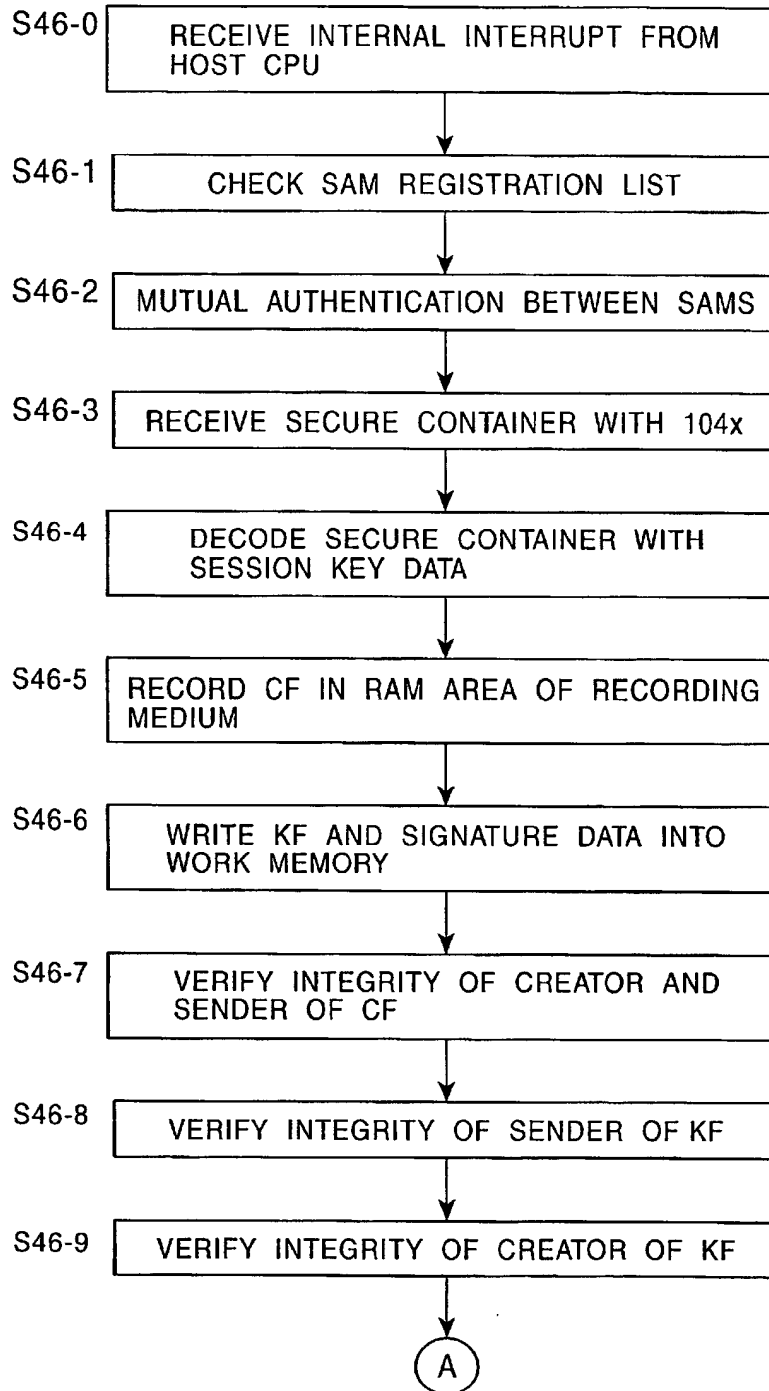


FIG. 47

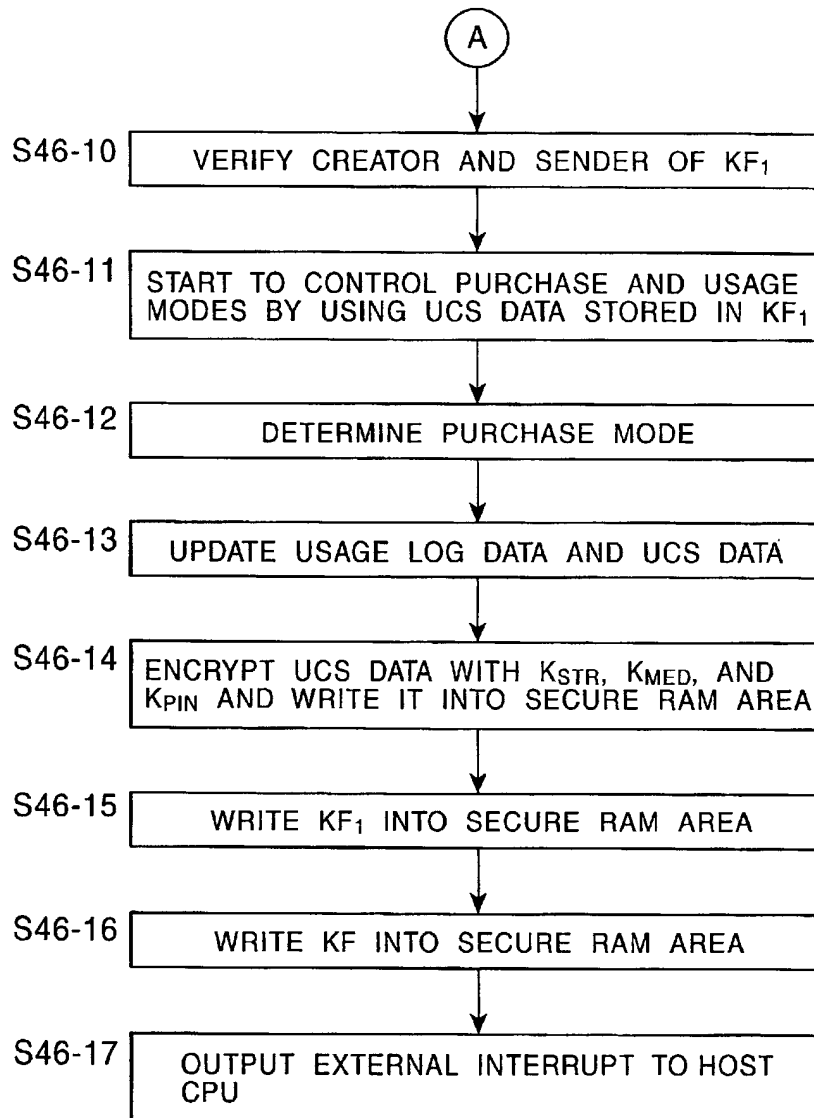


FIG. 48

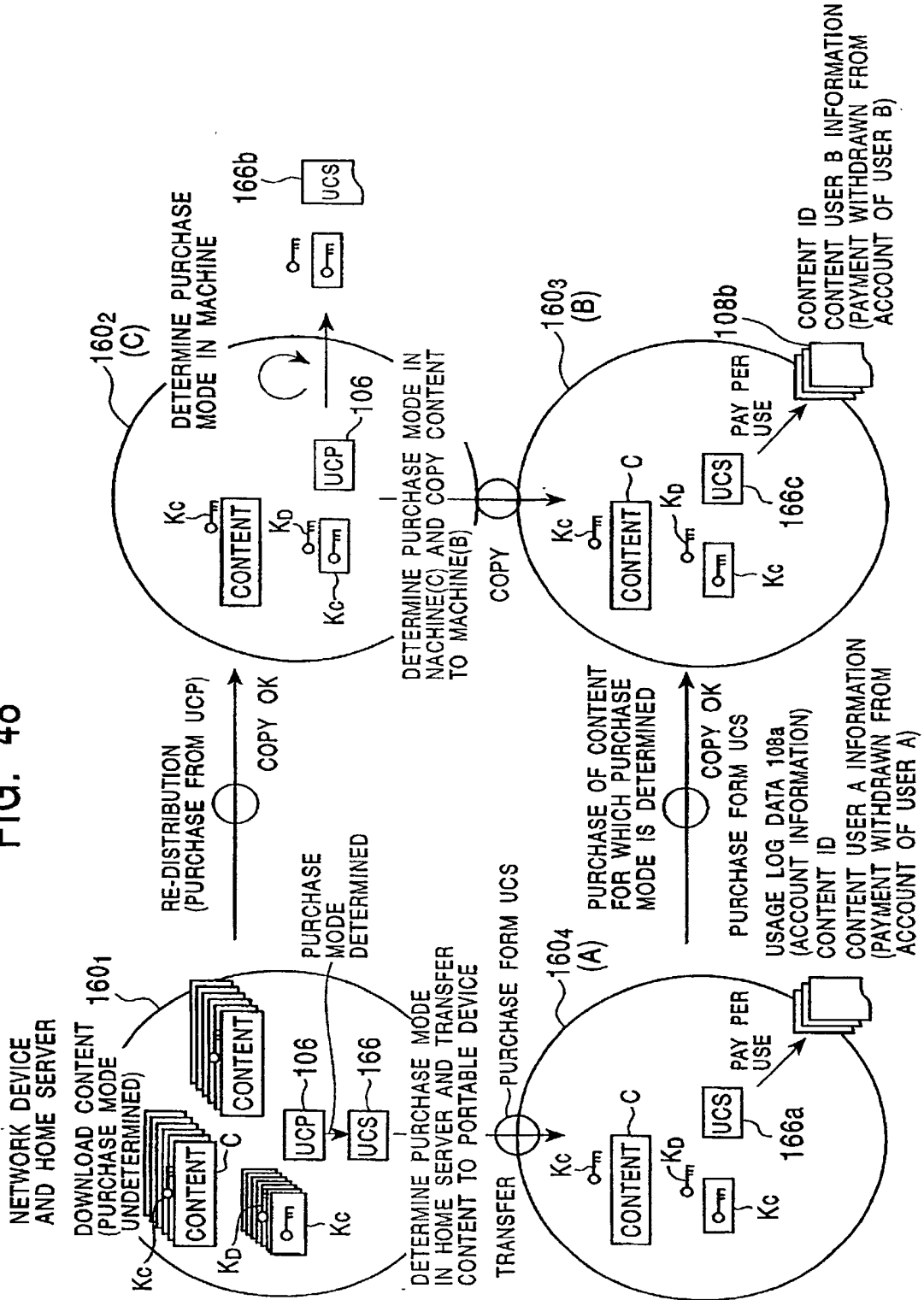


FIG. 49

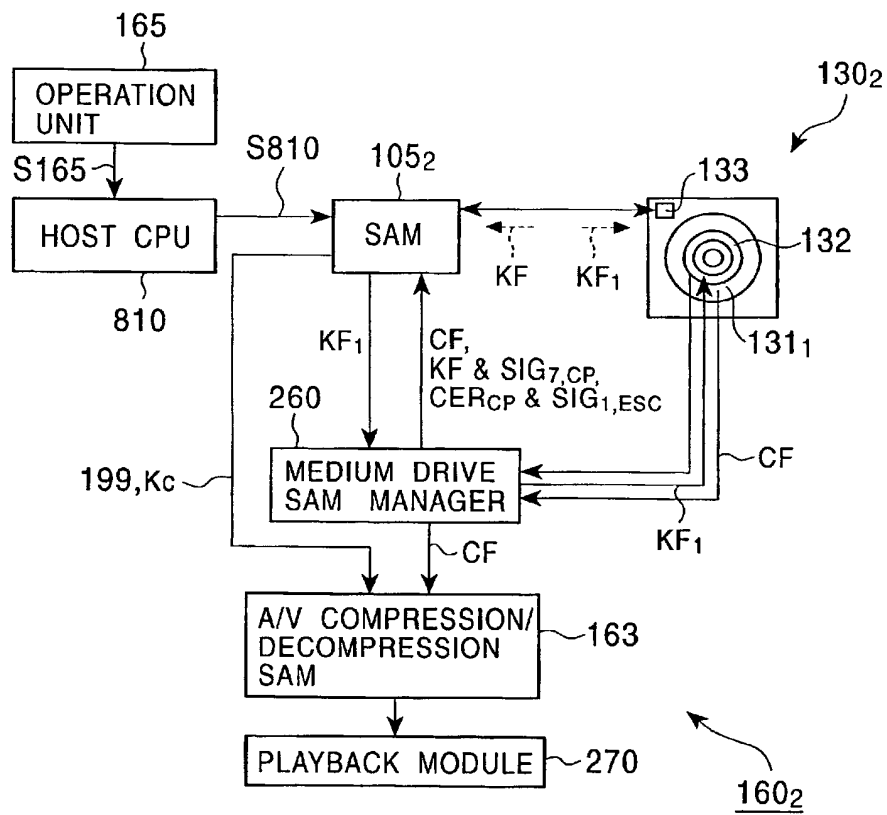


FIG. 51

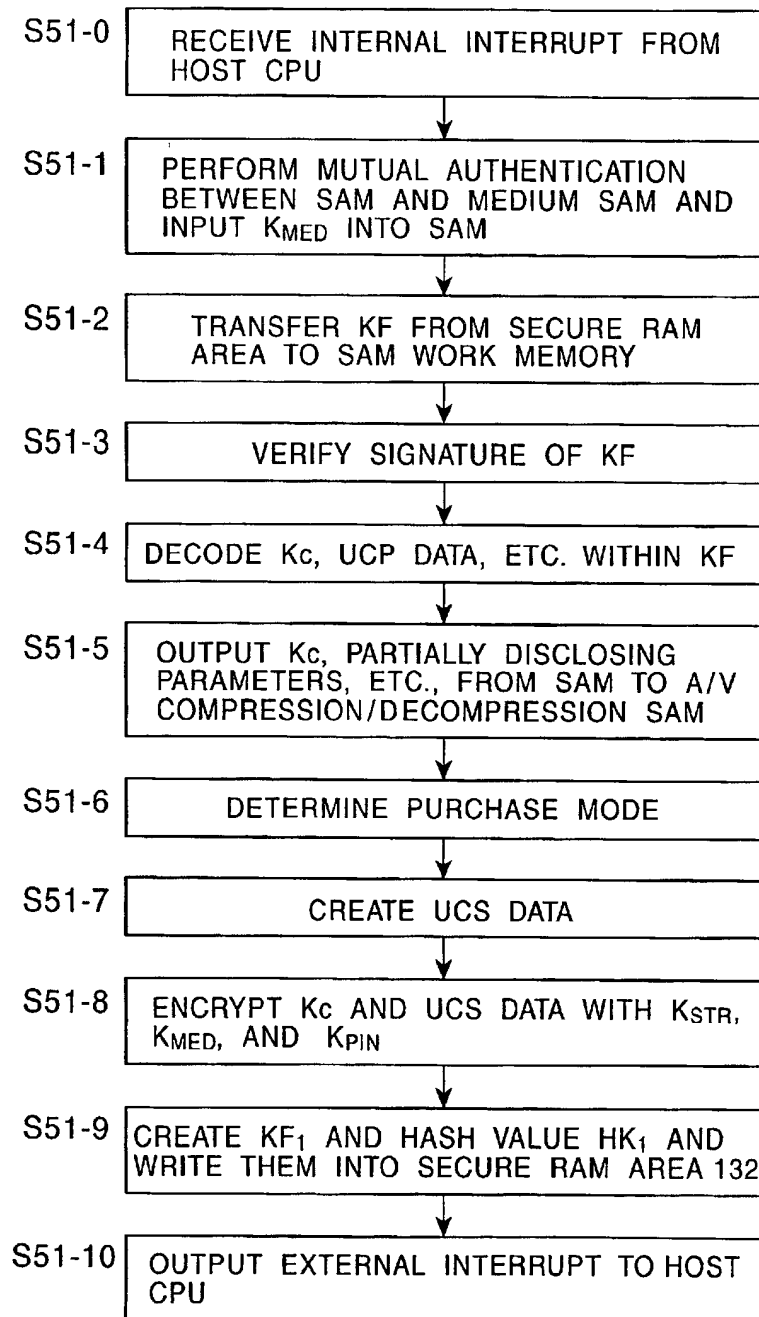
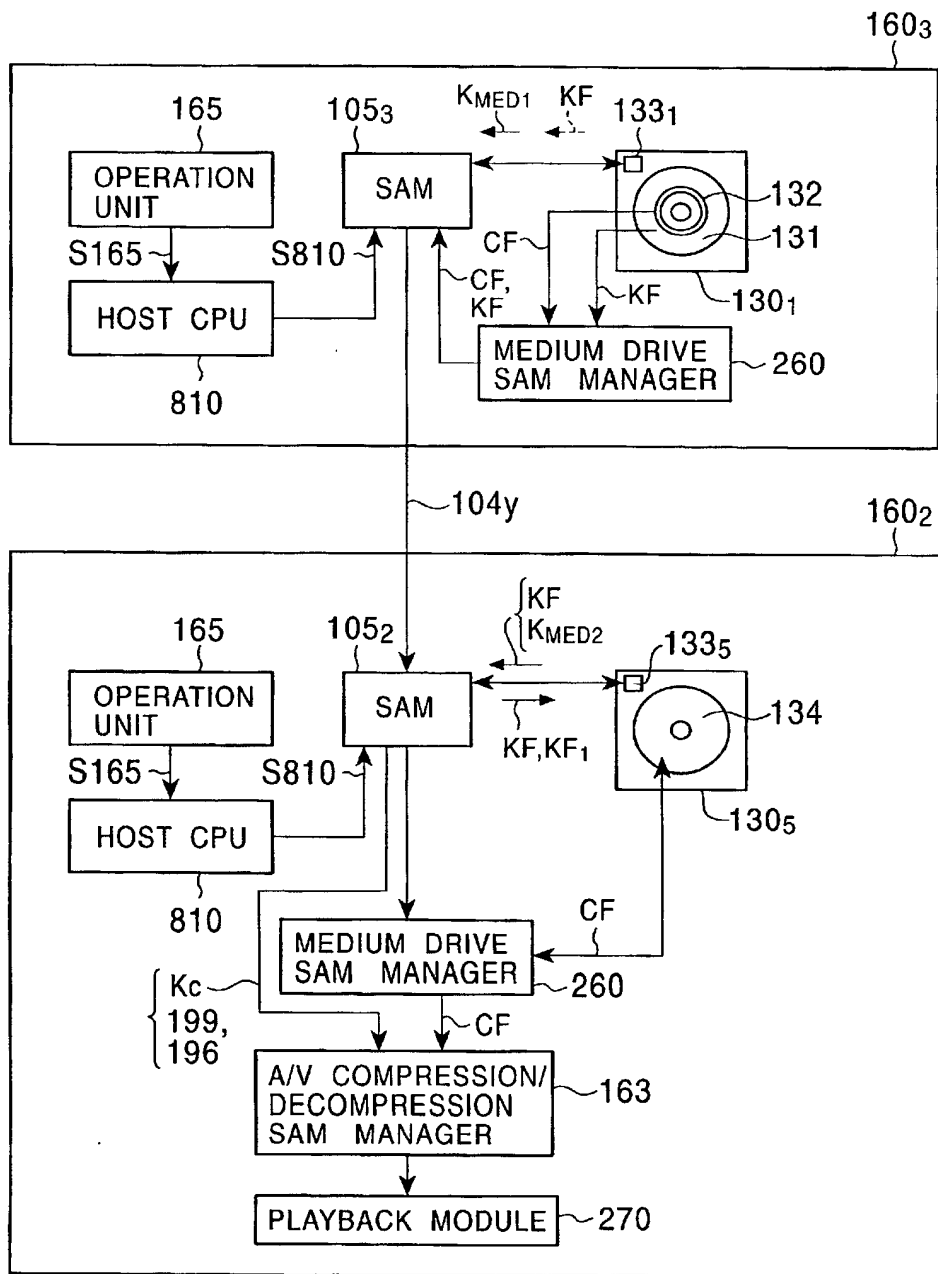


FIG. 52



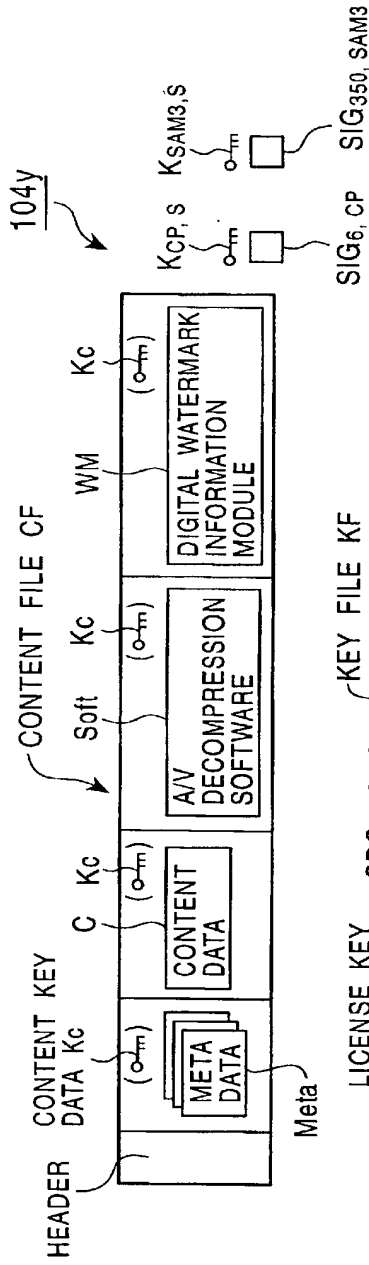


FIG. 54A

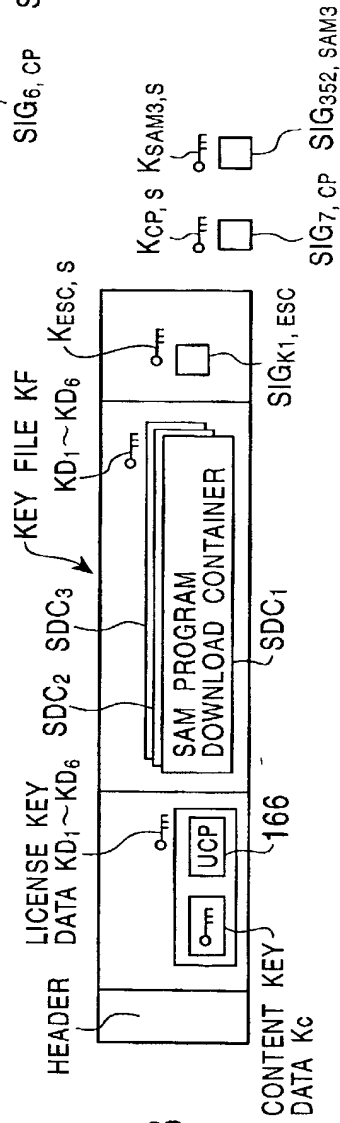


FIG. 54B

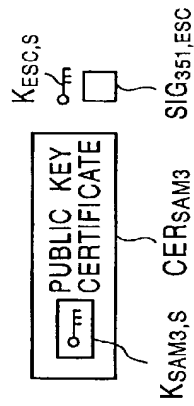


FIG. 54C

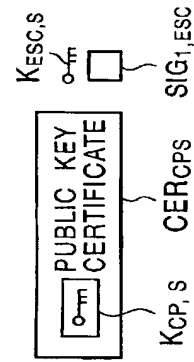


FIG. 54D

FIG. 55

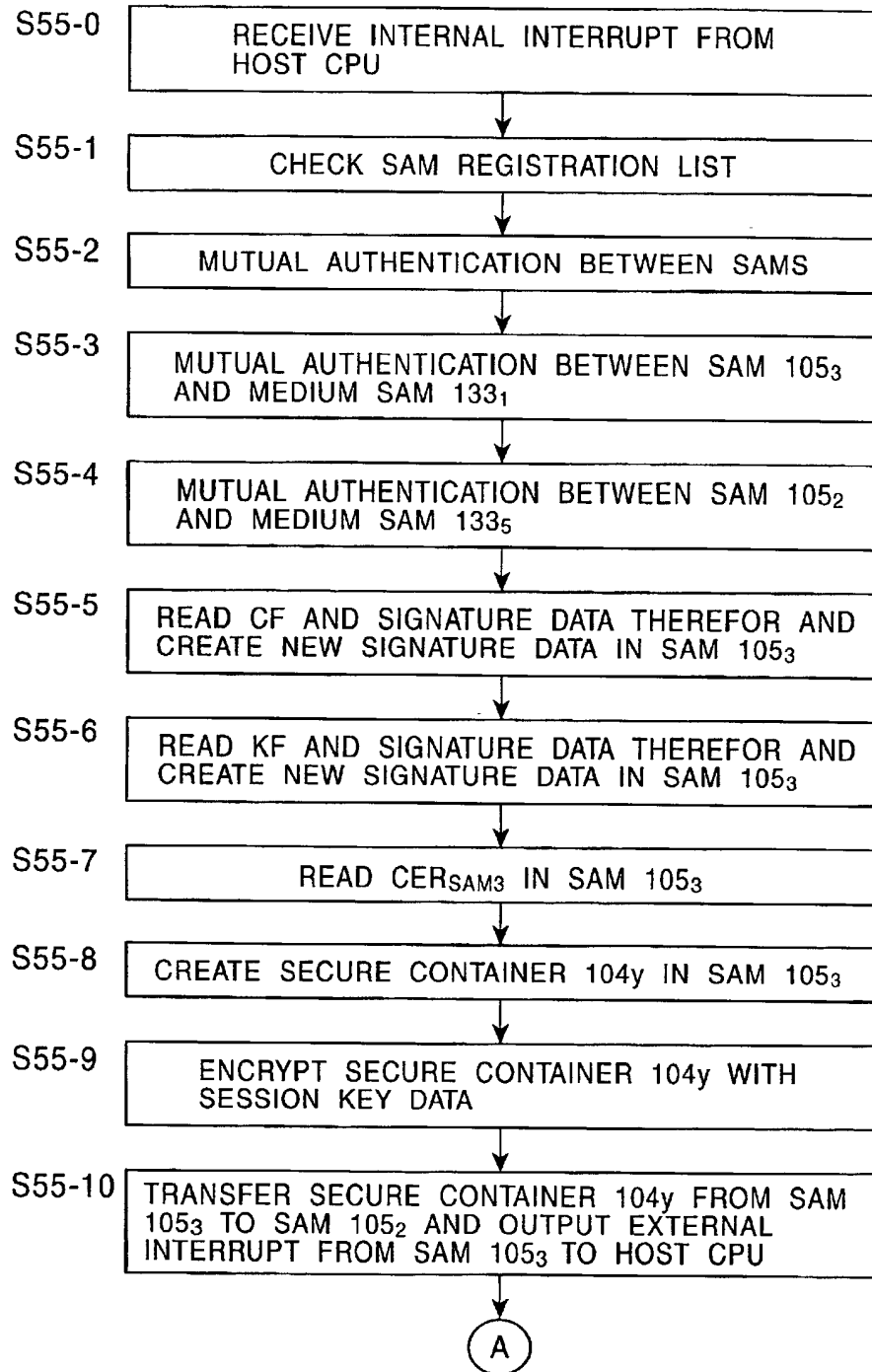


FIG. 56

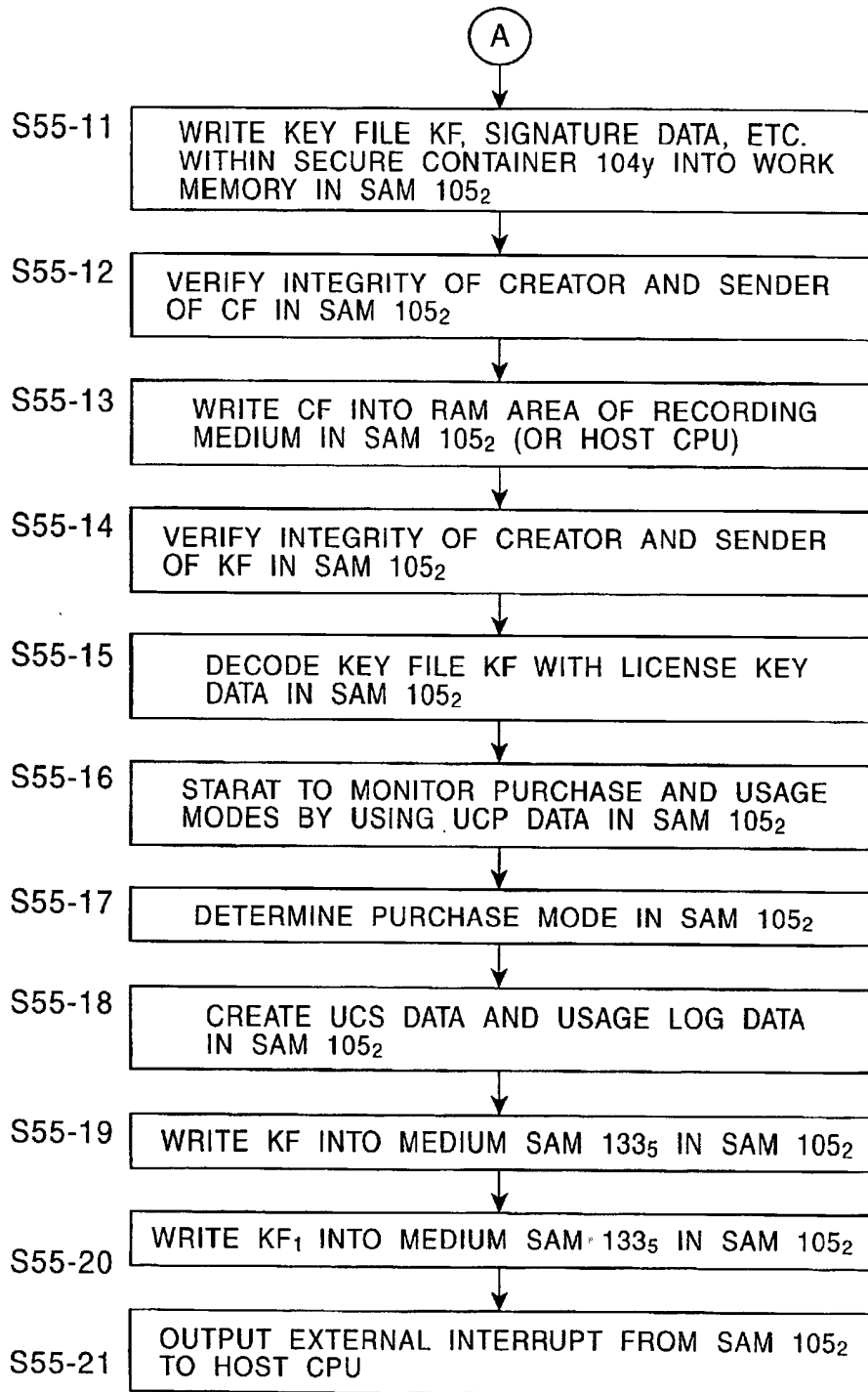


FIG. 58

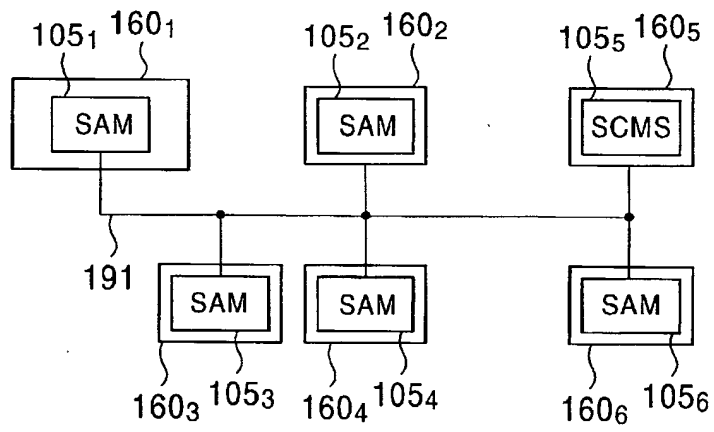


FIG. 59

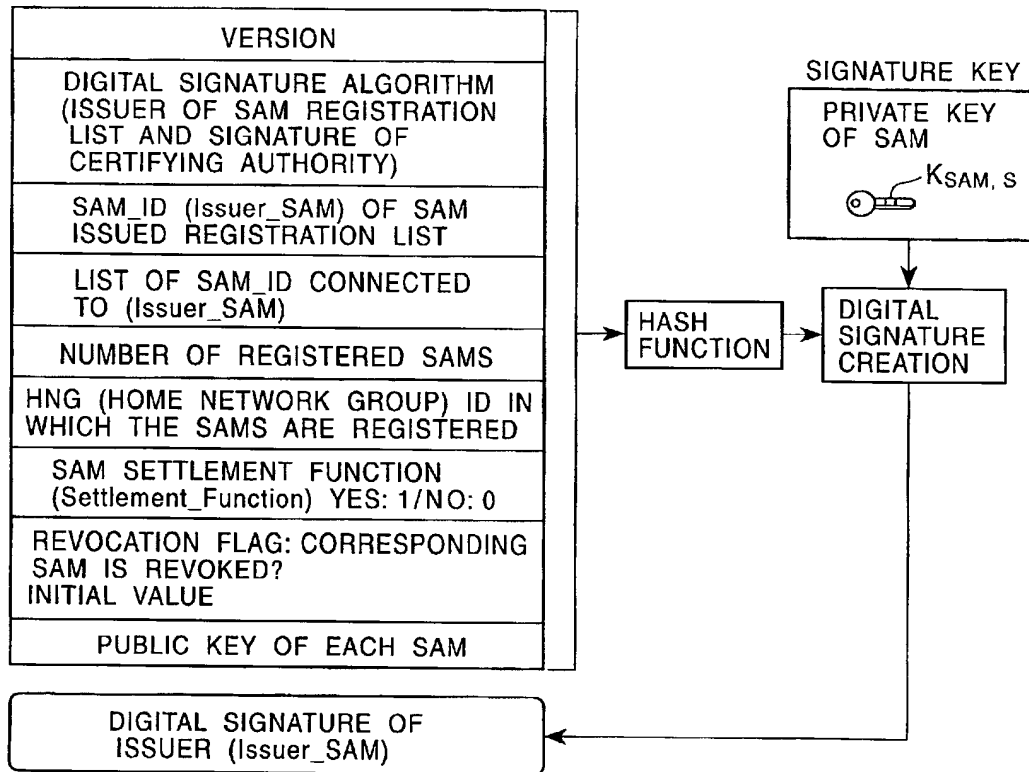


FIG. 60

X. 509 CRL FORMAT

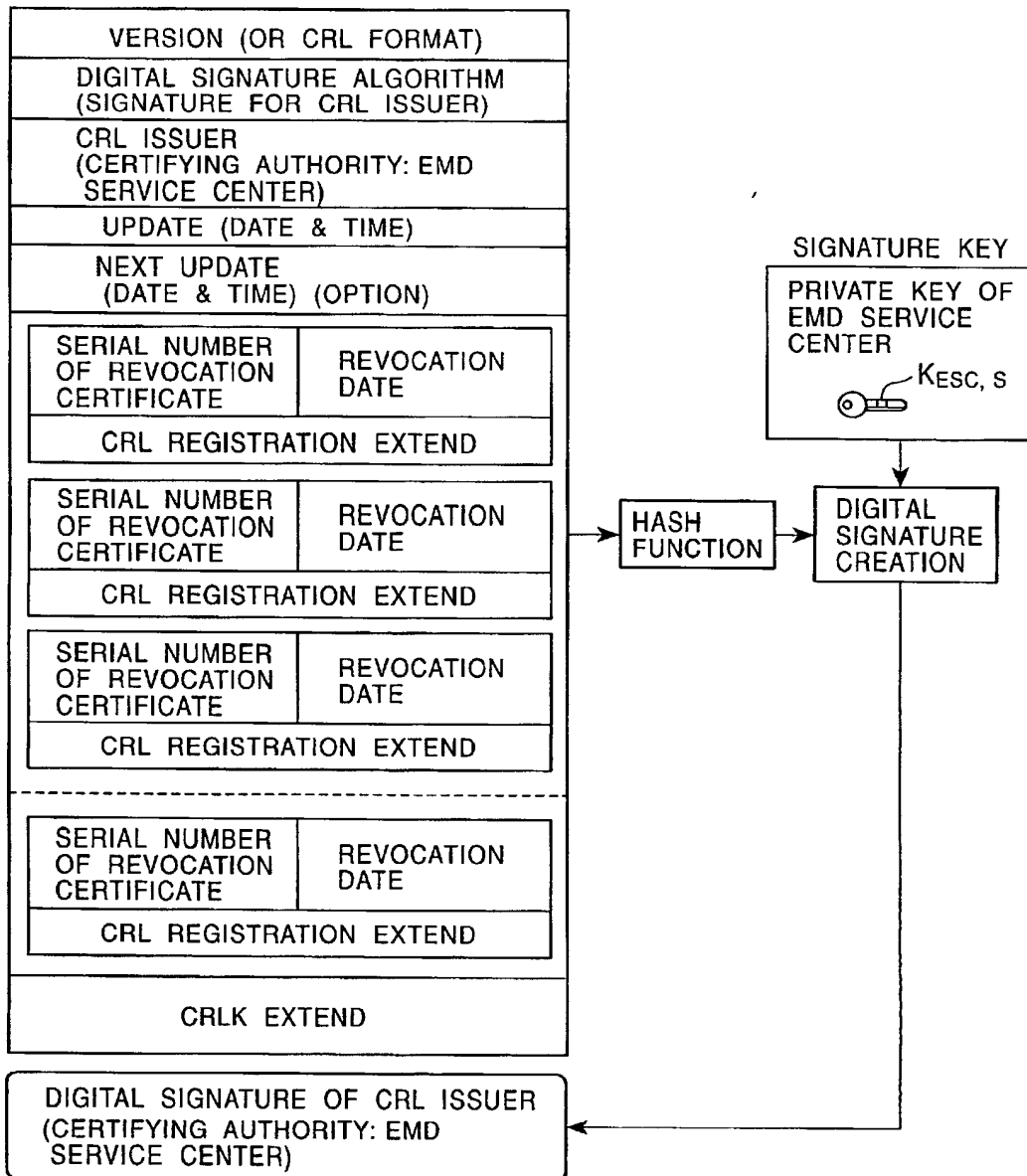


FIG. 61

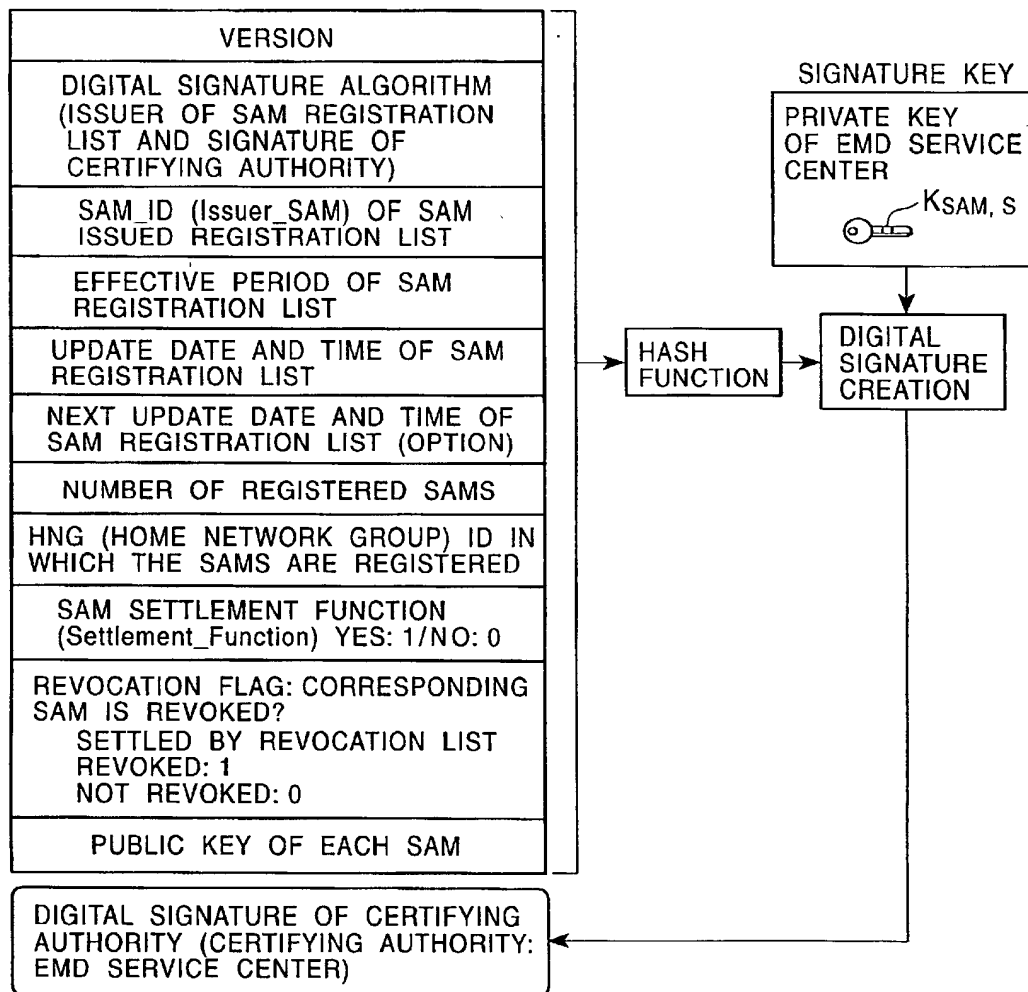


FIG. 62

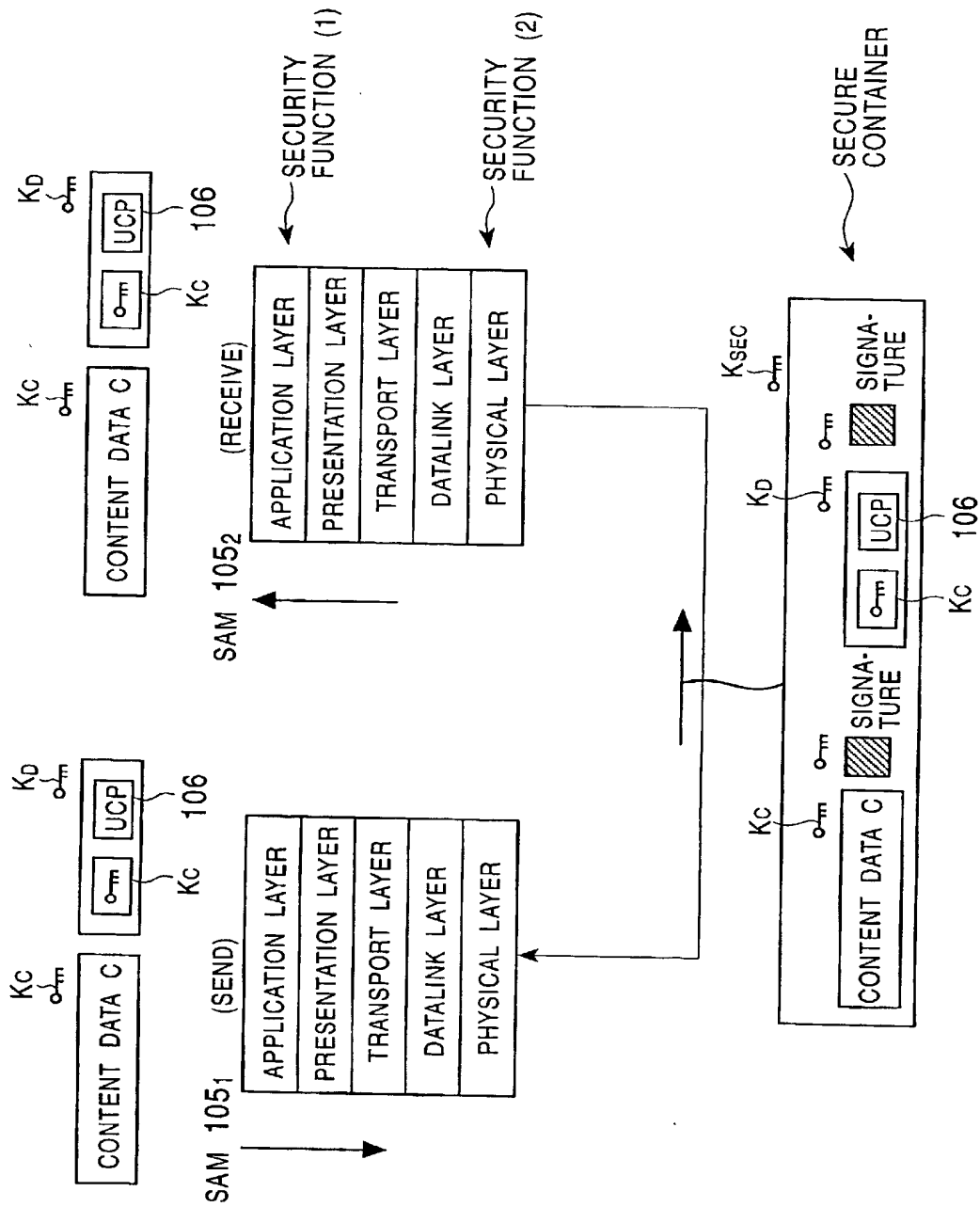


FIG. 64

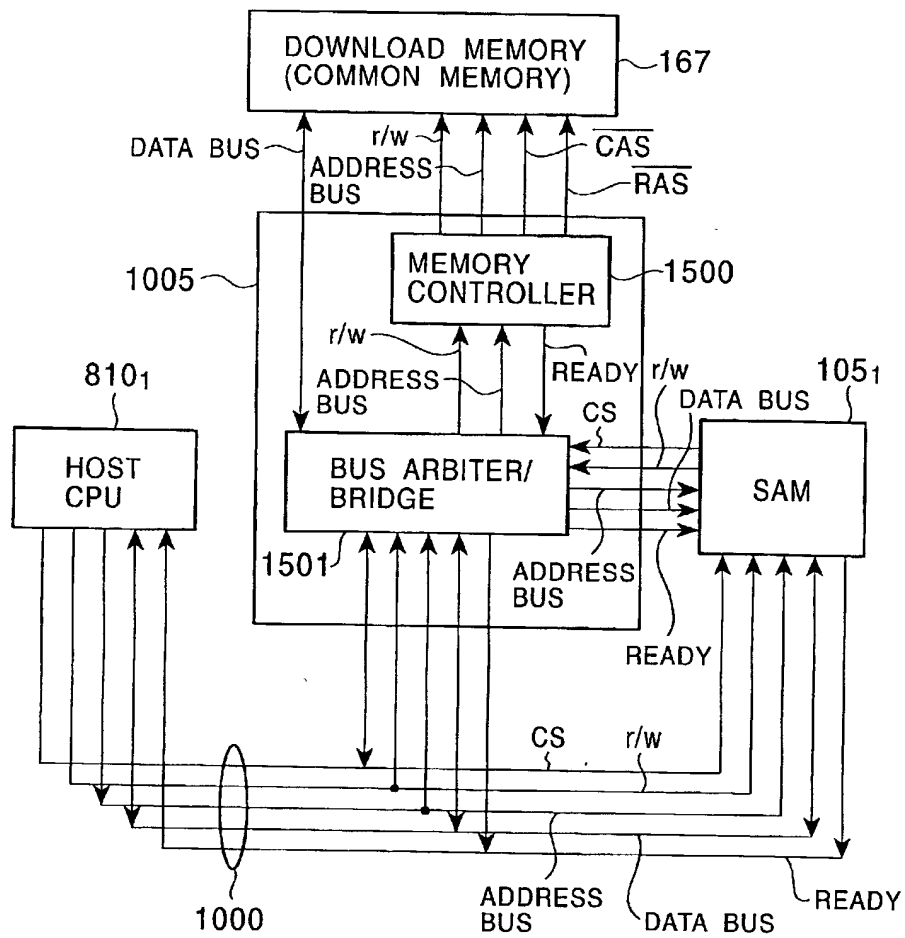


FIG. 65

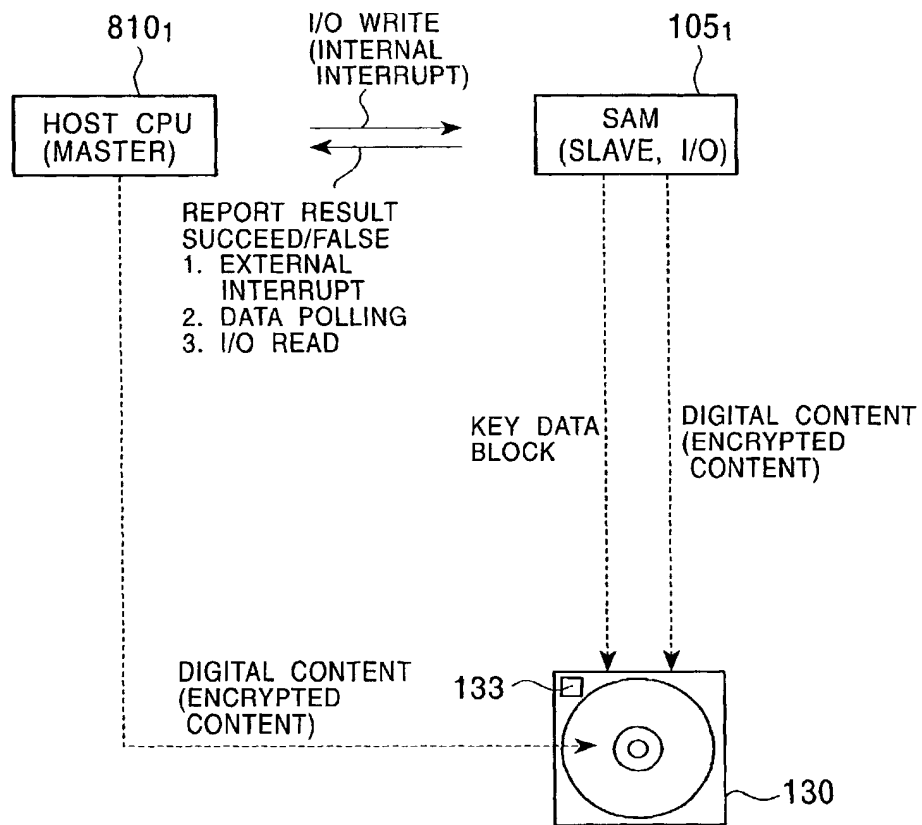


FIG. 66

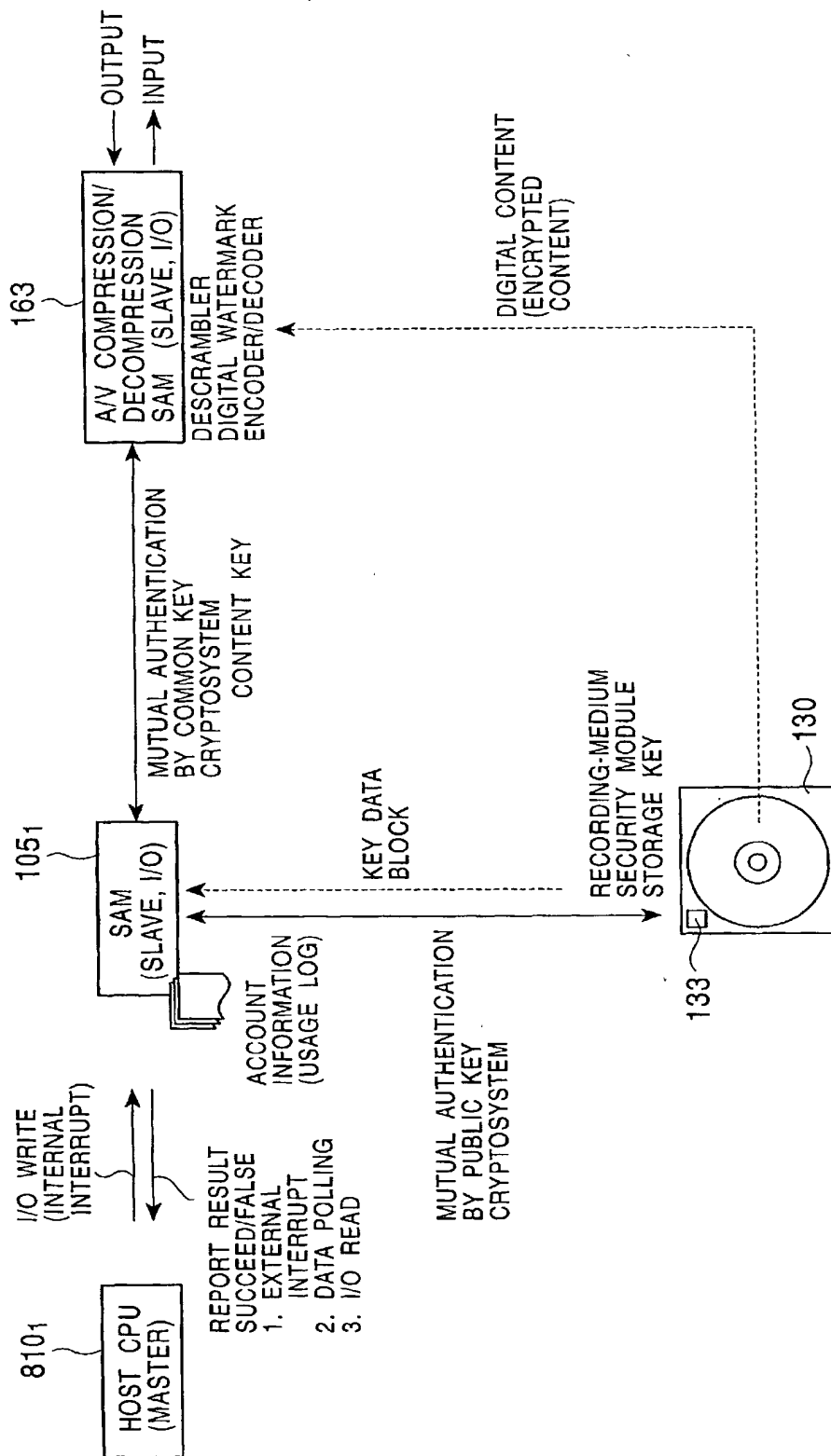


FIG. 67

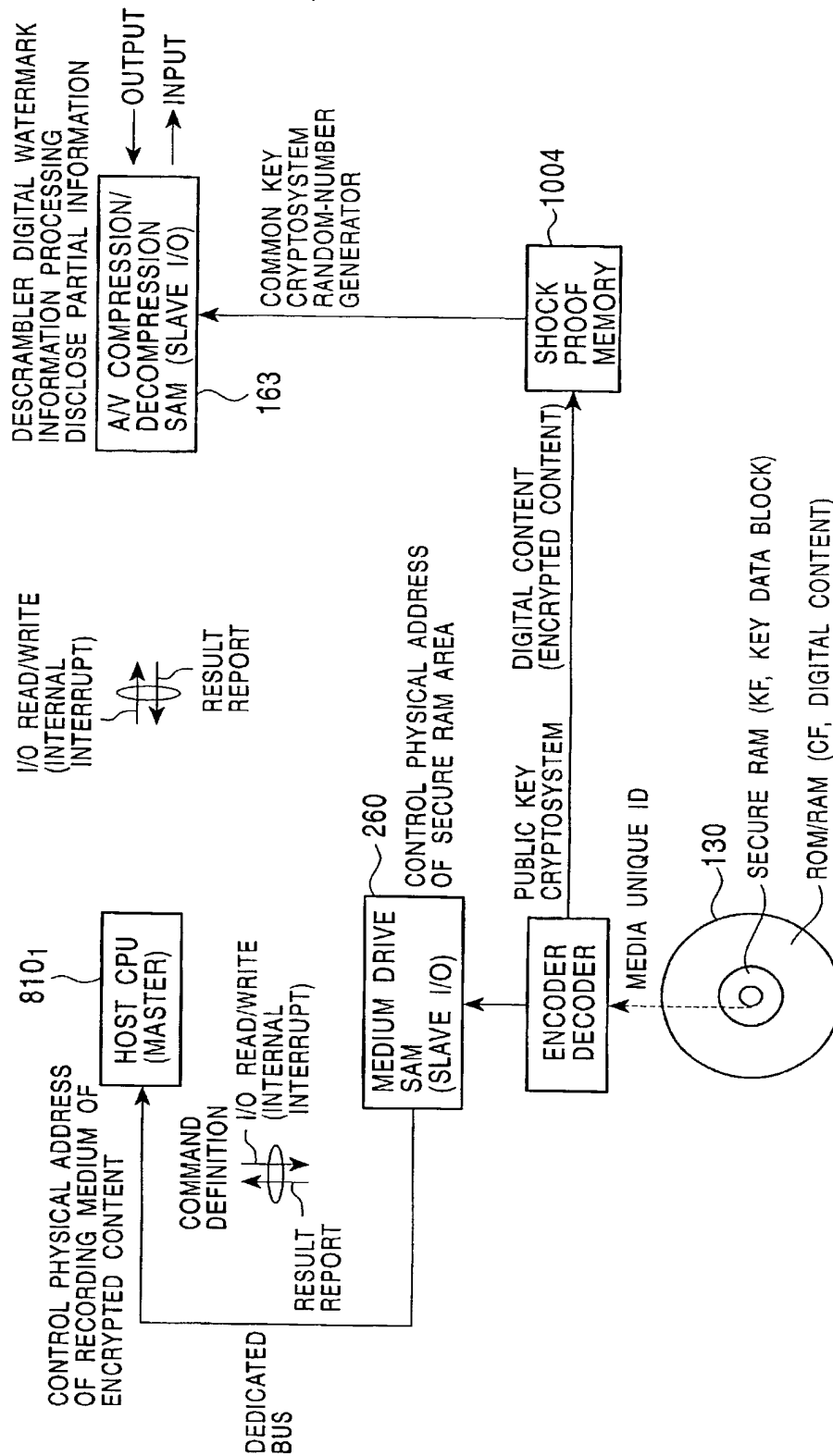


FIG. 68

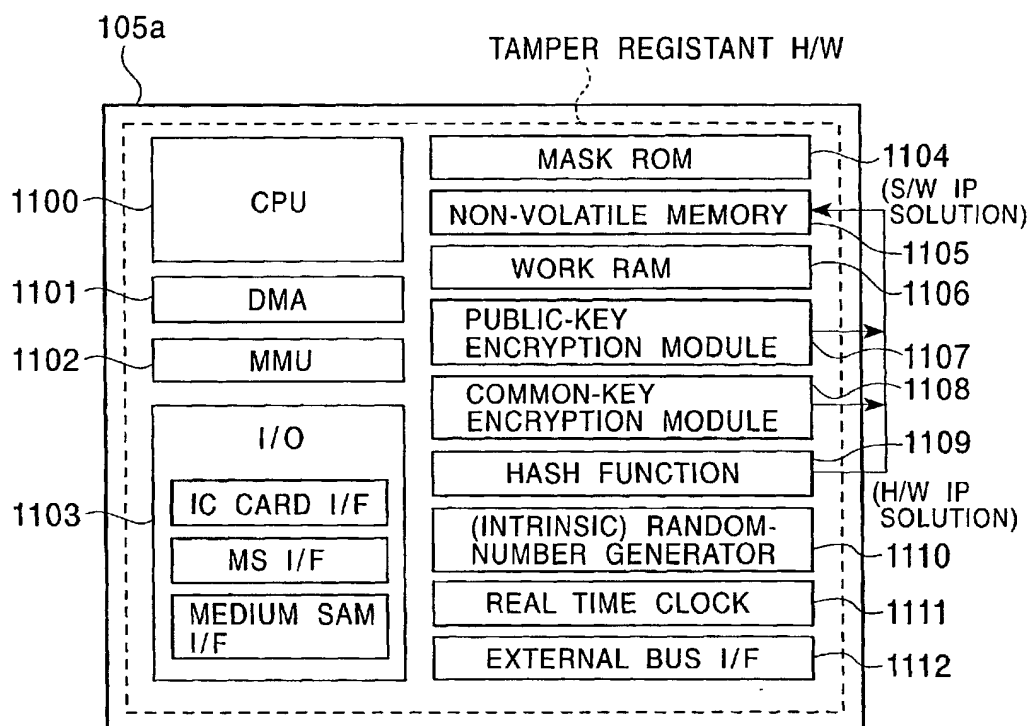


FIG. 69

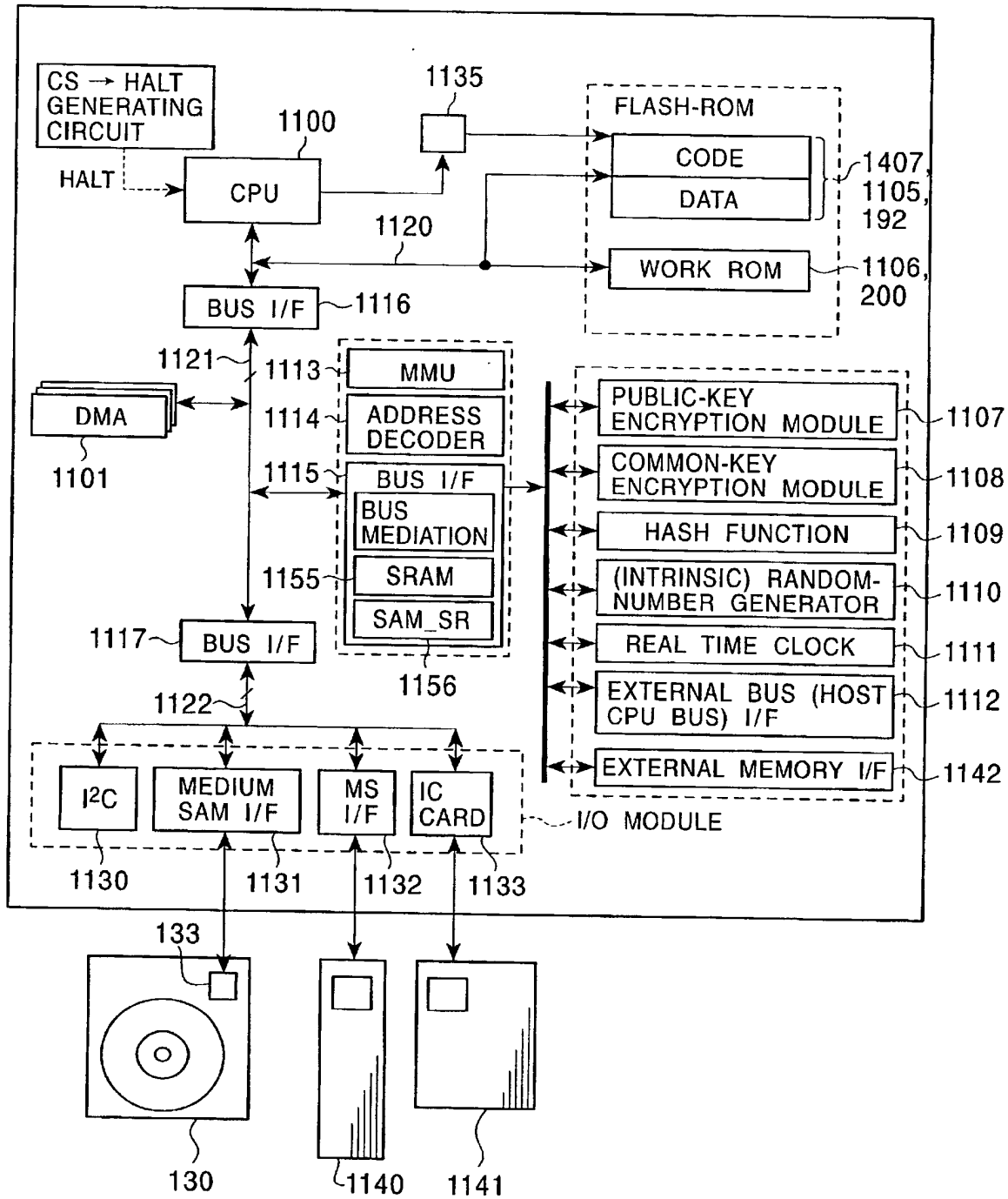


FIG. 70

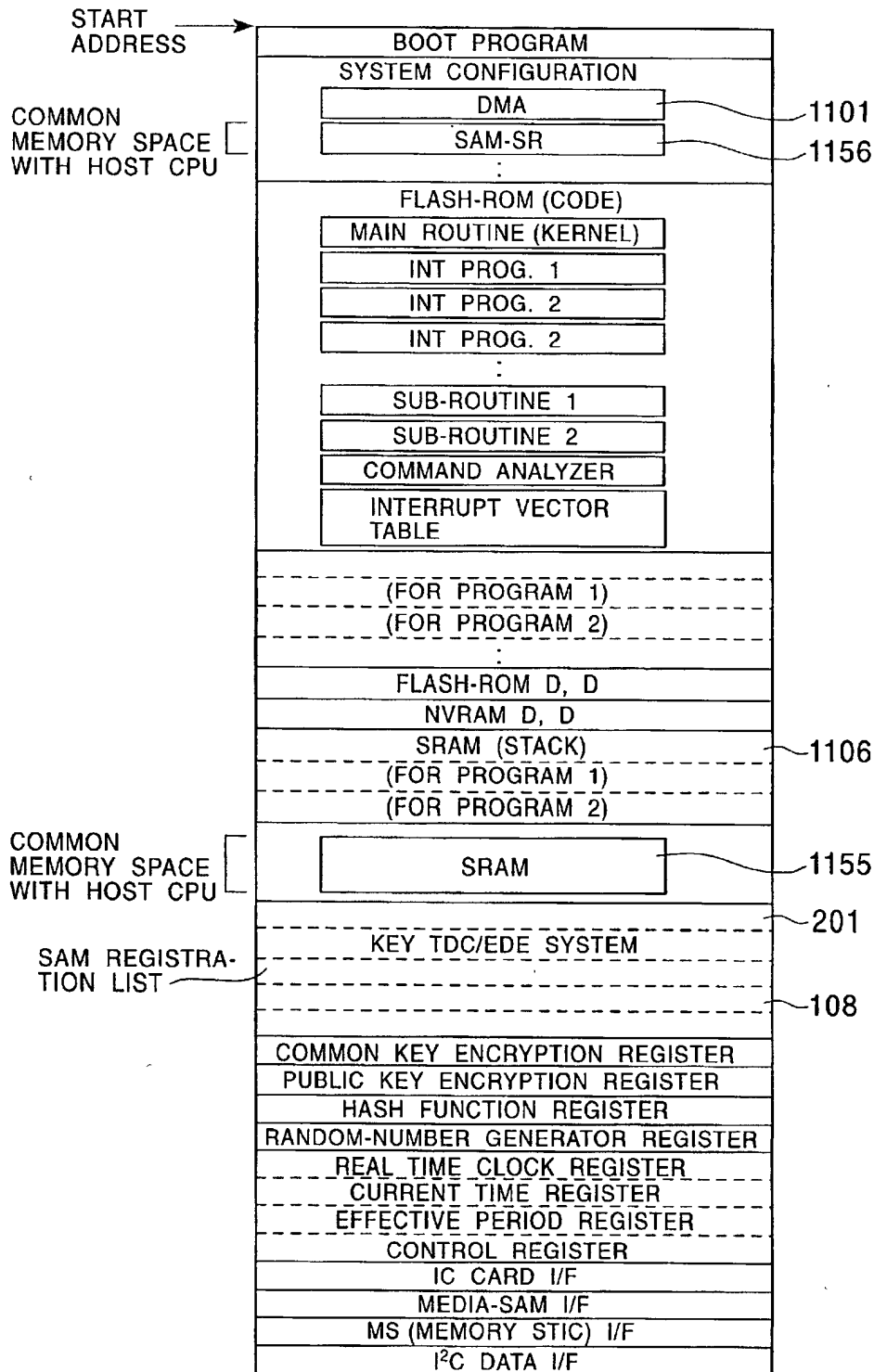


FIG. 71

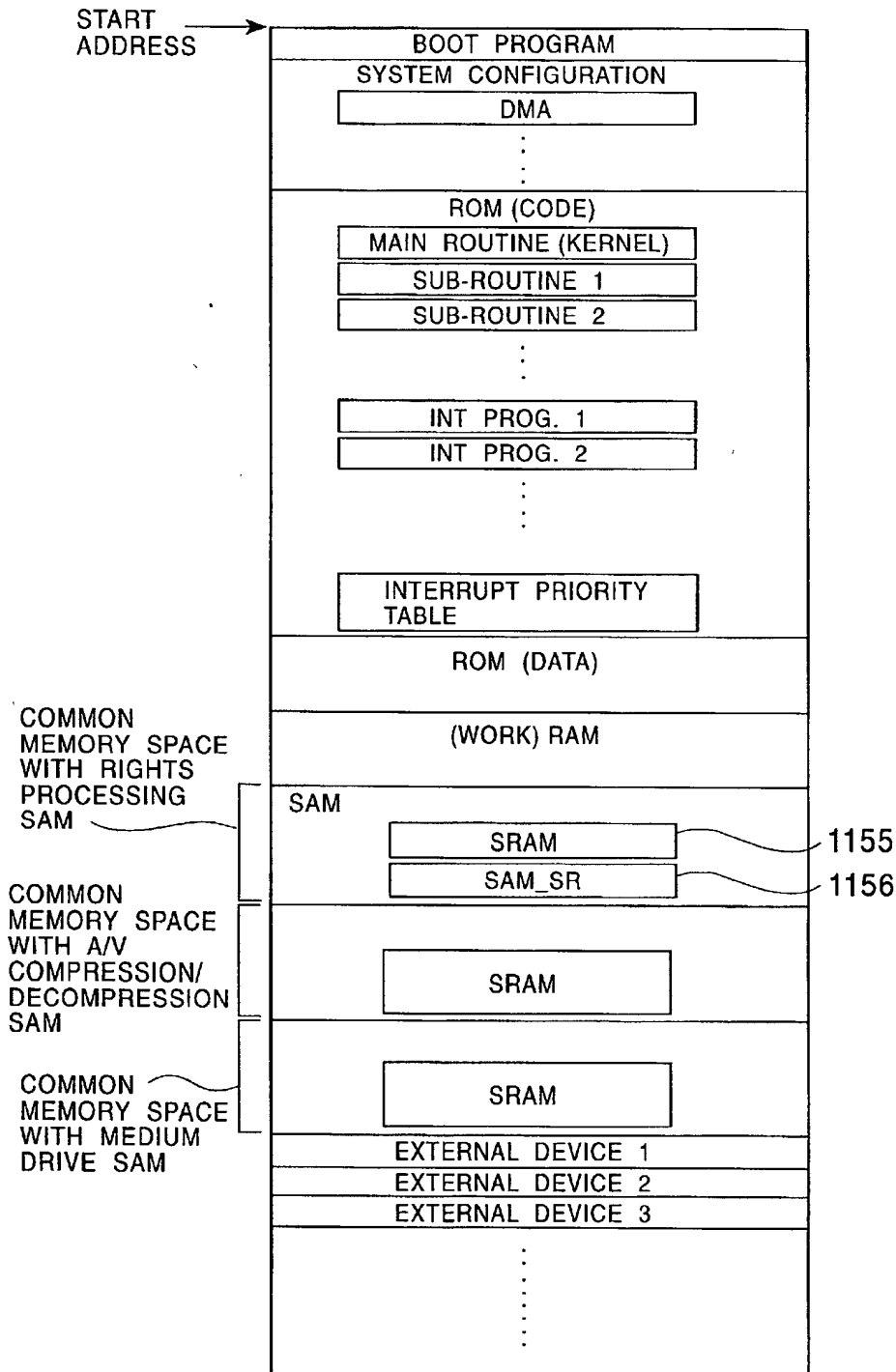


FIG. 72

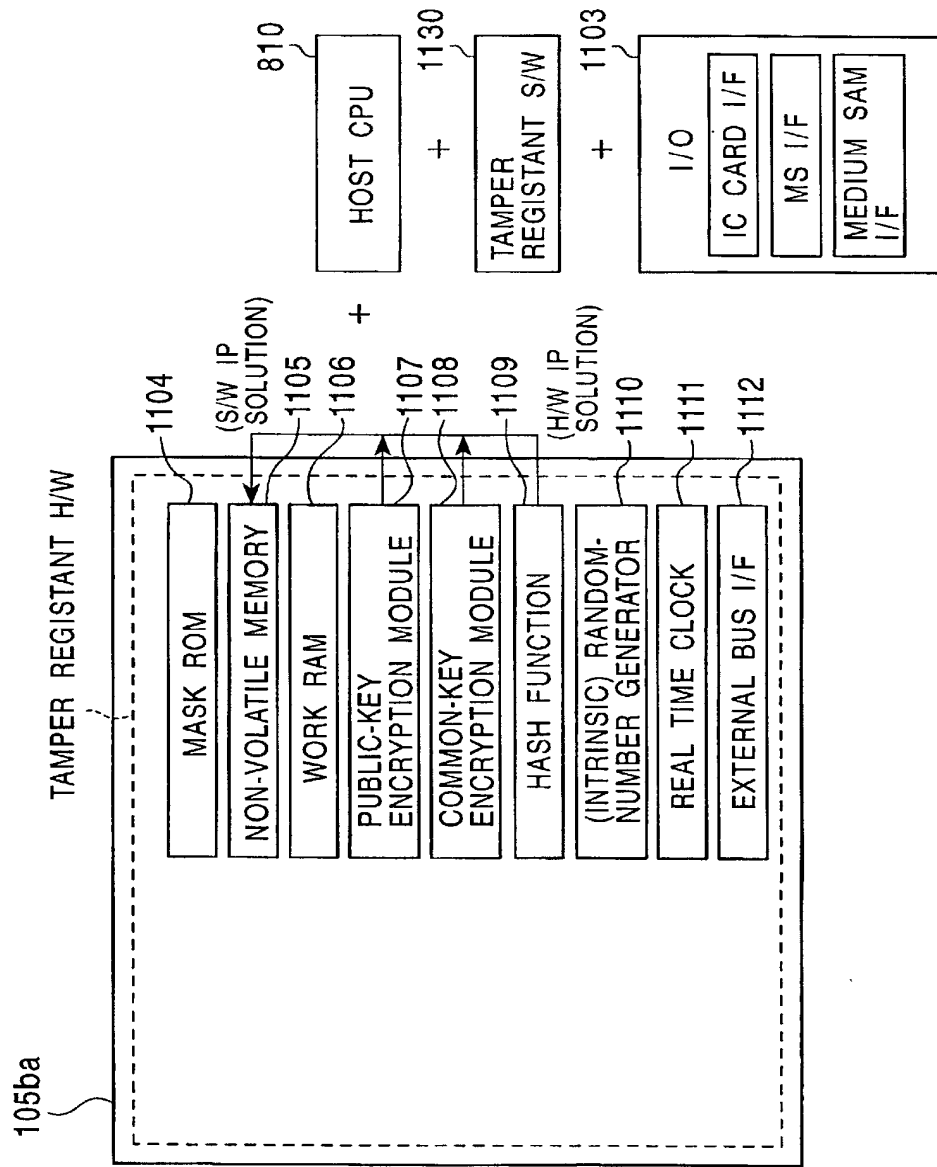


FIG. 73

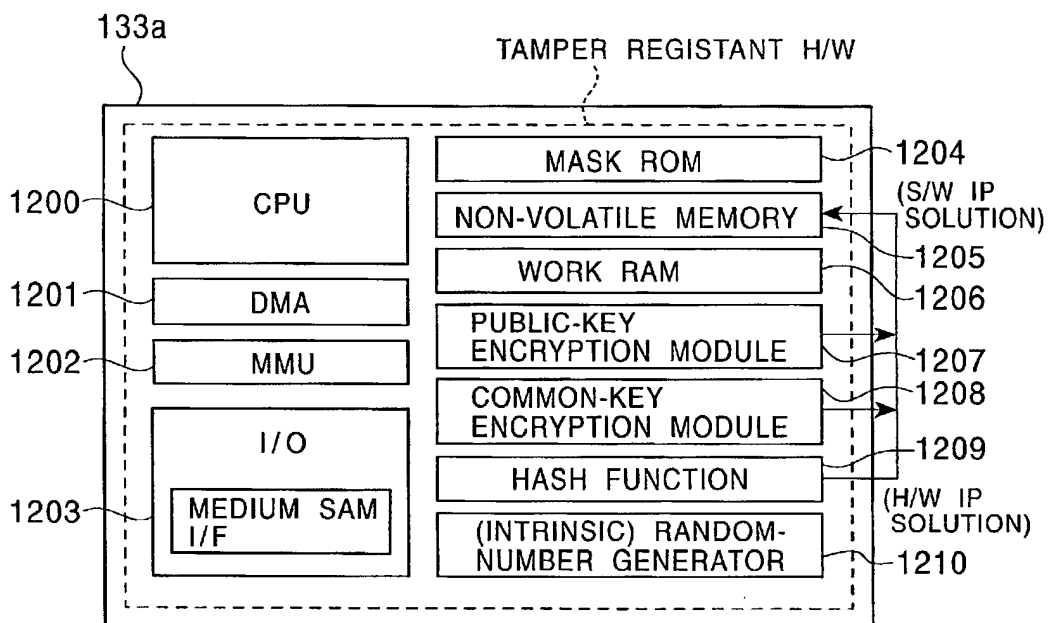


FIG. 74

MEDIUM SAM ID	
STORAGE KEY K_{STR} (MEDIUM KEY K_{MED})	
PUBLIC KEY OF THIRD PARTY (EMD SERVICE CENTER)	
PUBLIC KEY OF ROOT CA	
PUBLIC KEY CERTIFICATE OF MEDIUM SAM (X.509)	
PUBLIC KEY AND PRIVATE KEY OF MEDIUM SAM	
REVOCATION LIST (UPDATED VALUE)	
RIGHTS PROCESSING (PROFITS DISTRIBUTION) DATA ENTITY ID WHICH RECEIVES PROFITS	
MEDIUM TYPE • MEDIUM TYPE INFORMATION • ROM OR RAM	
PHYSICAL ADDRESS INFORMATION OF KEY FILE KF (REGISTER SPACE)	CHECK VALUES
CHECK VALUES (MAC)	
KF OF CONTENT NUMBER #1	CHECK VALUES (MAC)
KF OF CONTENT NUMBER #2	
KF OF CONTENT NUMBER #3	
KF OF CONTENT NUMBER #4	
KF OF CONTENT NUMBER #5	
.	
.	
.	
KF OF CONTENT NUMBER #n	
CHECK VALUES (MAC)	

CIPHERTEXT BY
LICENSE KEY KDCIPHERTEXT BY
LICENSE KEY KD

FIG. 75

MEDIUM SAM ID		
STORAGE KEY K_{STR} (MEDIUM KEY K_{MED})		
USER ID		
PASSWORD		
FAVORITE INFORMATION		
SETTLEMENT INFORMATION (CREDIT CARD NO.)		
ELECTRONIC MONEY		
PUBLIC KEY OF THIRD PARTY (EMD SERVICE CENTER)		
PUBLIC KEY OF ROOT CA		
PUBLIC KEY CERTIFICATE OF MEDIUM SAM (X.509)		
PUBLIC KEY AND PRIVATE KEY OF MEDIUM SAM		
REVOCATION LIST (UPDATED VALUE)		
RIGHTS PROCESSING (PROFITS DISTRIBUTION) DATA ENTITY ID WHICH RECEIVES PROFITS		
MEDIUM TYPE • MEDIUM TYPE INFORMATION • ROM OR RAM		
PHYSICAL ADDRESS INFORMATION OF KEY FILE KF (REGISTER SPACE)	CHECK VALUES	CIPHERTEXT BY LICENSE KEY KD
CHECK VALUES (MAC)		
KF/ KF_1 OF CONTENT NUMBER #1	CHECK VALUES (MAC)	CIPHERTEXT BY LICENSE KEY KD
KF/ KF_1 OF CONTENT NUMBER #2		
KF/ KF_1 OF CONTENT NUMBER #3		
KF/ KF_1 OF CONTENT NUMBER #4		
KF/ KF_1 OF CONTENT NUMBER #5		
· · · ·		
KF/ KF_1 OF CONTENT NUMBER #n		
CHECK VALUES (MAC)		

FIG. 76

MEDIUM SAM ID
STORAGE KEY K _{STR} (MEDIUM KEY K _{MED})
PUBLIC KEY OF THIRD PARTY (EMD SERVICE CENTER)
PUBLIC KEY OF ROOT CA
PUBLIC KEY CERTIFICATE OF MEDIUM SAM (X.509)
PUBLIC KEY AND PRIVATE KEY OF MEDIUM SAM
REVOCATION LIST (UPDATED VALUE)
RIGHTS PROCESSING (PROFITS DISTRIBUTION) DATA ENTITY ID WHICH RECEIVES PROFITS
MEDIUM TYPE <ul style="list-style-type: none">• MEDIUM TYPE INFORMATION• ROM OR RAM

FIG. 77

MEDIUM SAM ID		
STORAGE KEY K_{STR} (MEDIUM KEY K_{MED})		
USER ID		
PASSWORD		
FAVORITE INFORMATION		
SETTLEMENT INFORMATION (CREDIT CARD NO.)		
ELECTRONIC MONEY		
PUBLIC KEY OF THIRD PARTY (EMD SERVICE CENTER)		
PUBLIC KEY OF ROOT CA		
PUBLIC KEY CERTIFICATE OF MEDIUM SAM (X.509)		
PUBLIC KEY AND PRIVATE KEY OF MEDIUM SAM		
REVOCATION LIST (UPDATED VALUE)		
RIGHTS PROCESSING (PROFITS DISTRIBUTION) DATA ENTITY ID WHICH RECEIVES PROFITS		
MEDIUM TYPE • MEDIUM TYPE INFORMATION • ROM OR RAM		
PHYSICAL ADDRESS INFORMATION OF KEY FILE KF (REGISTER SPACE)	CHECK VALUES	CIPHERTEXT BY STORAGE KEY K_{STR}
CHECK VALUES (MAC)		
KF/ KF_1 OF CONTENT NUMBER #1	CHECK VALUES (MAC)	CIPHERTEXT BY STORAGE KEY K_{STR}
KF/ KF_1 OF CONTENT NUMBER #2		
KF/ KF_1 OF CONTENT NUMBER #3		
KF/ KF_1 OF CONTENT NUMBER #4		
KF/ KF_1 OF CONTENT NUMBER #5		
• • • •		
KF/ KF_1 OF CONTENT NUMBER #n		
CHECK VALUES (MAC)		

FIG. 78

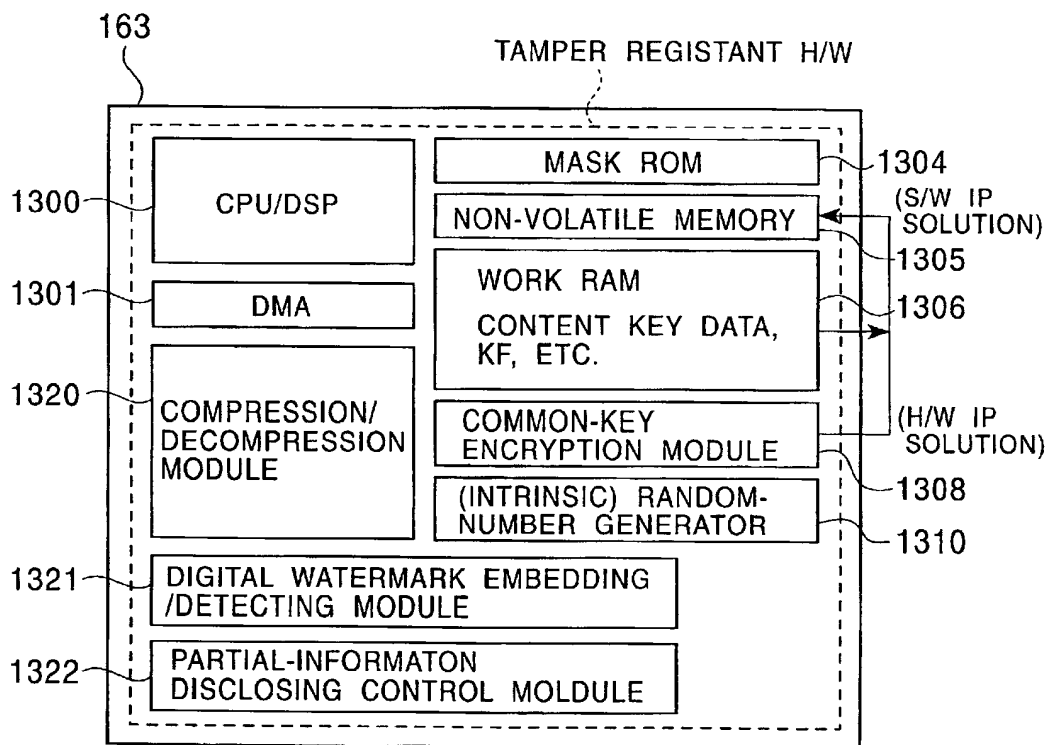


FIG. 79

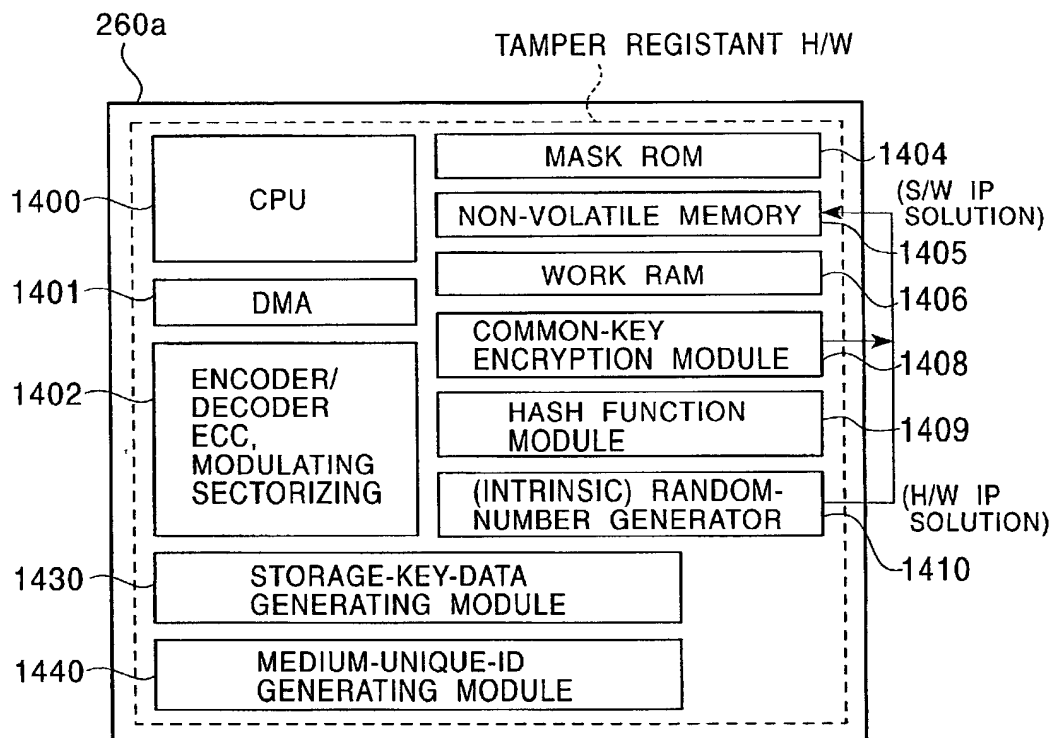
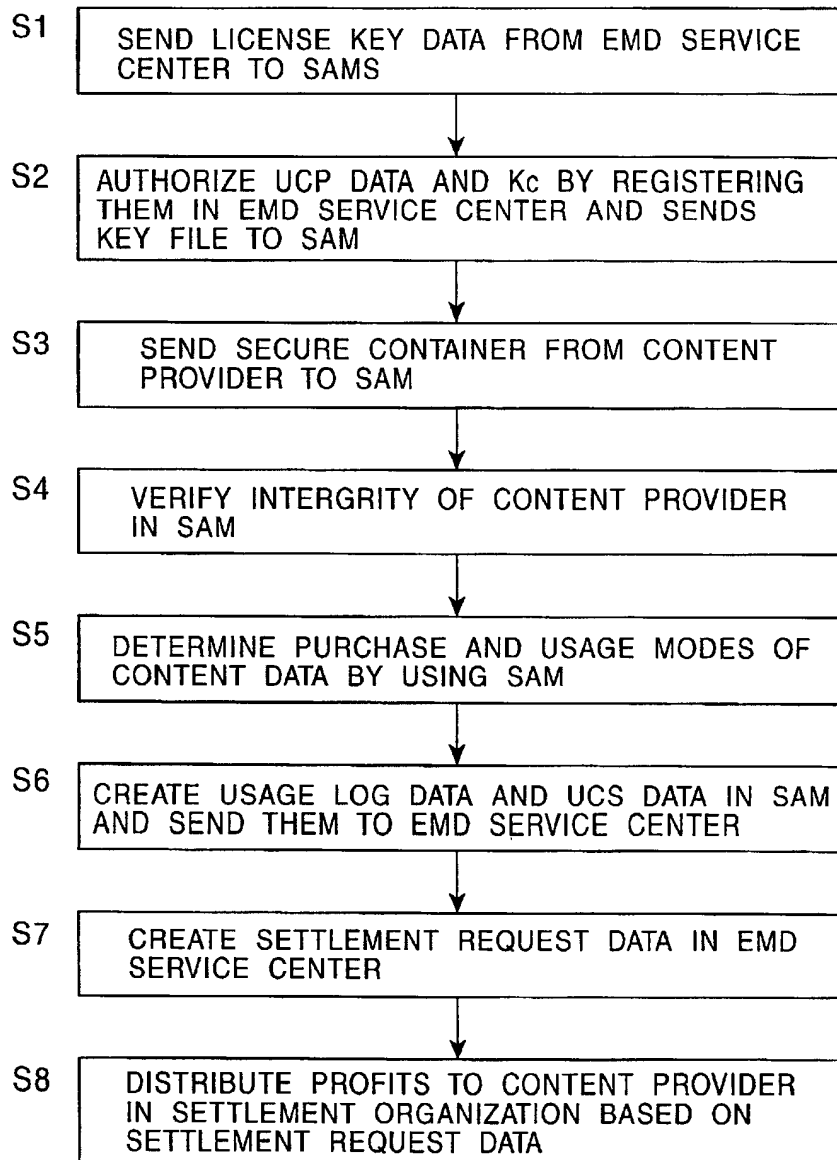


FIG. 80



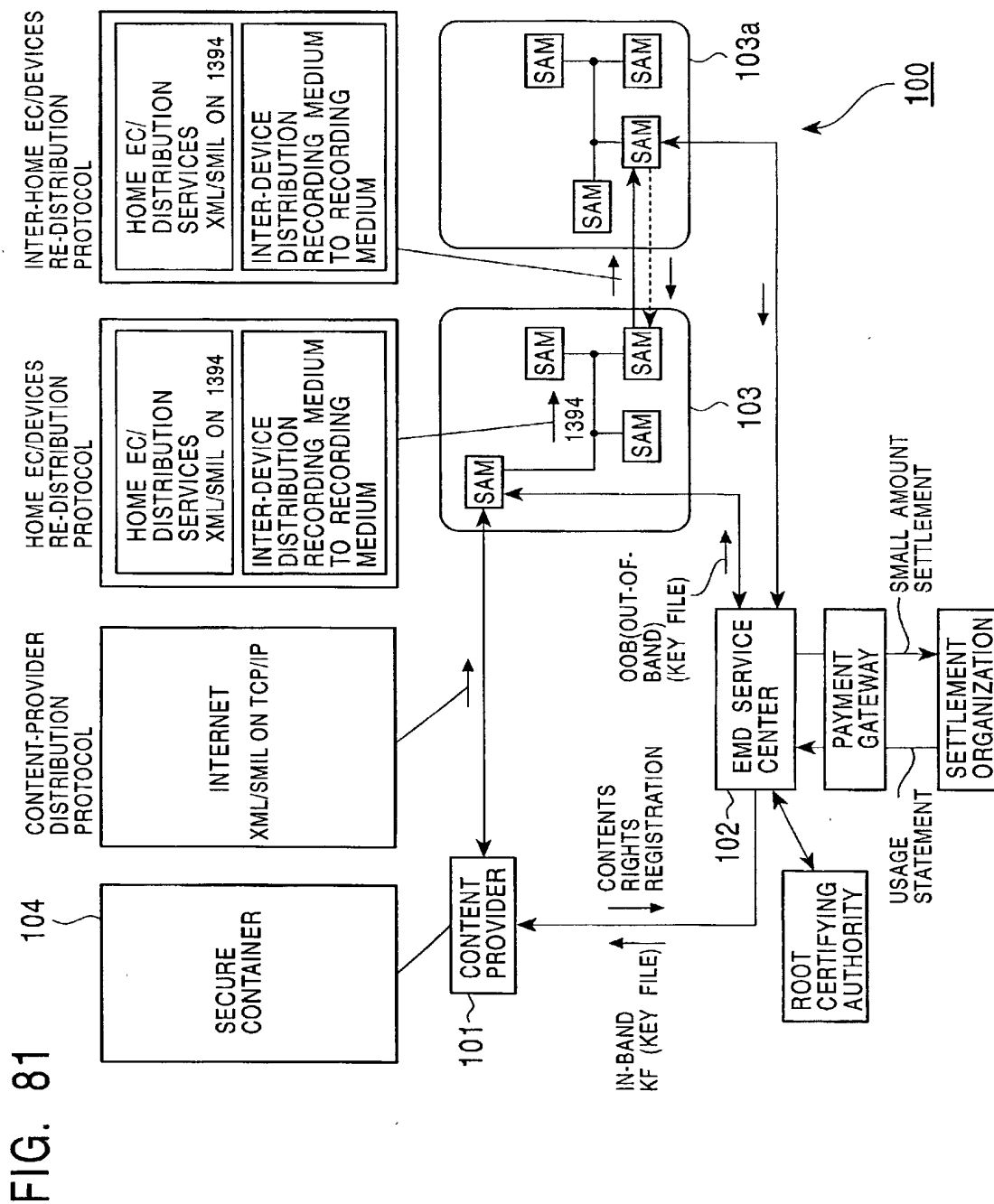


FIG. 82

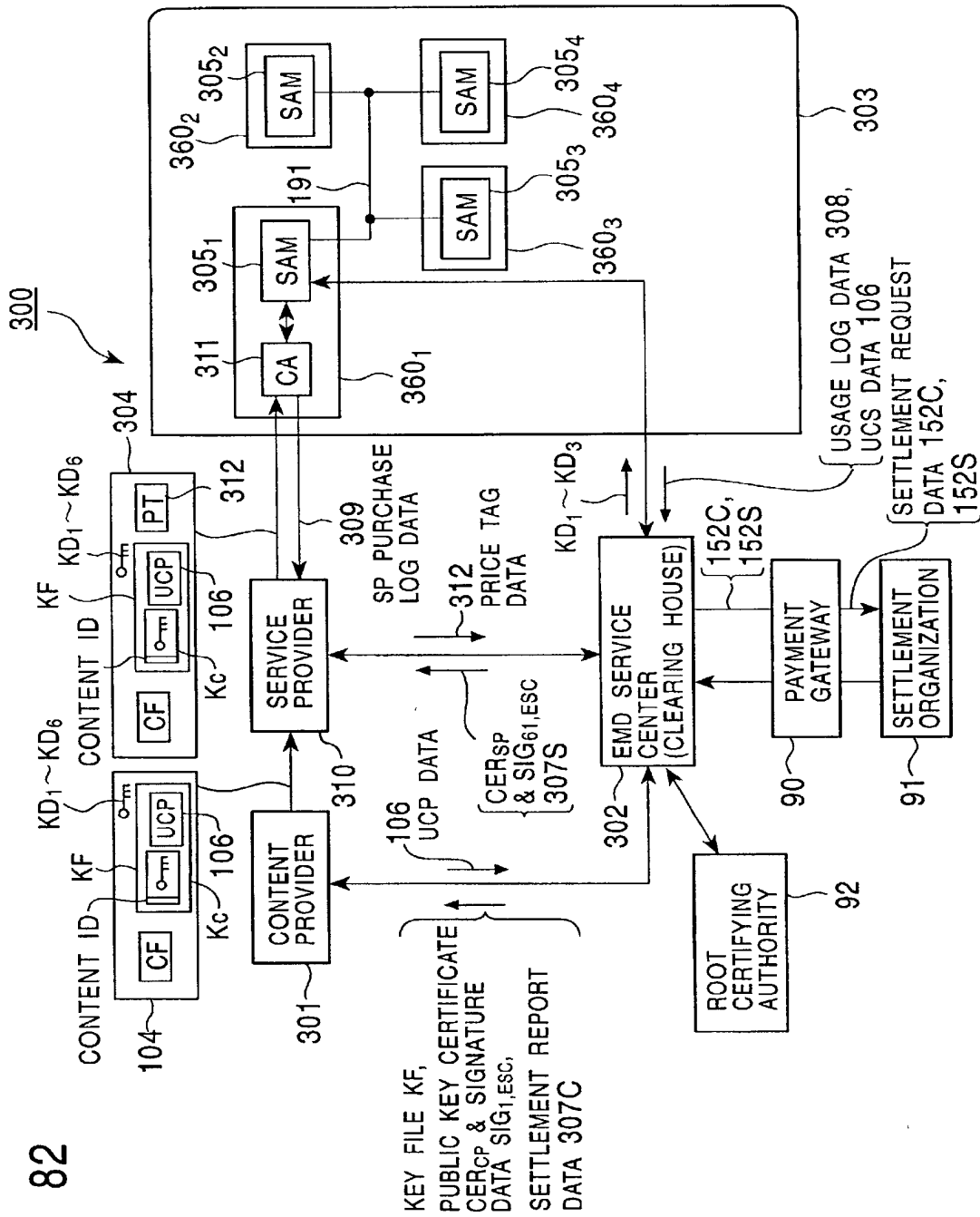
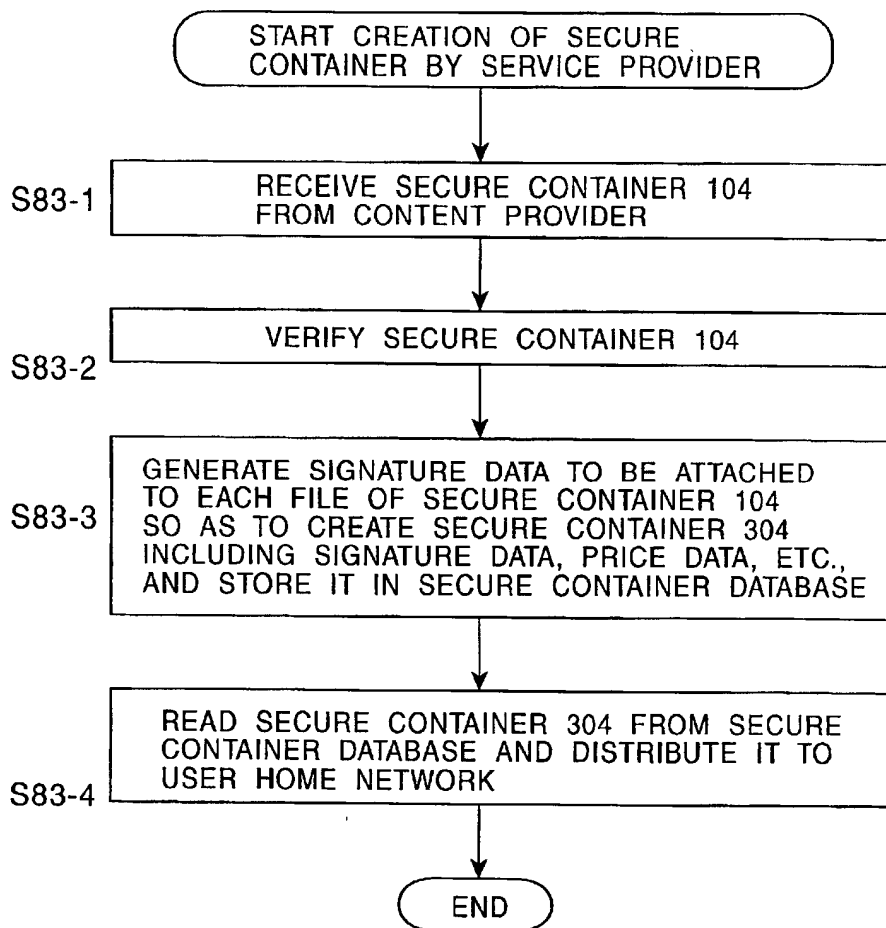


FIG. 83



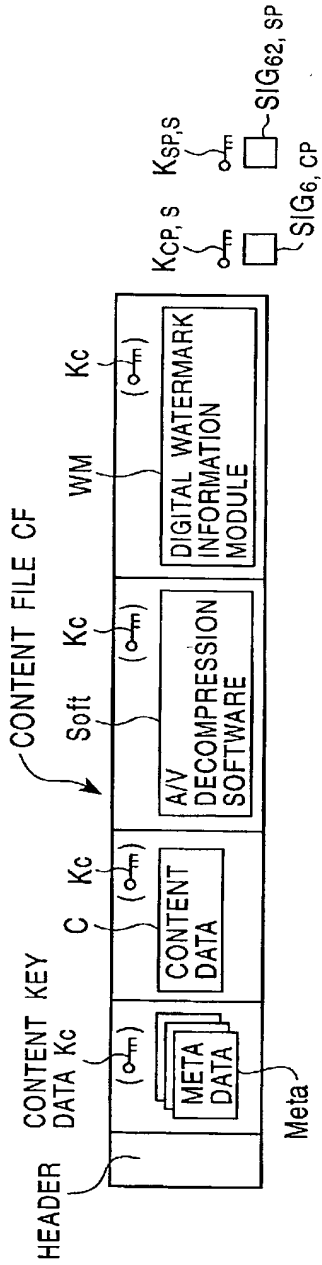


FIG. 84A

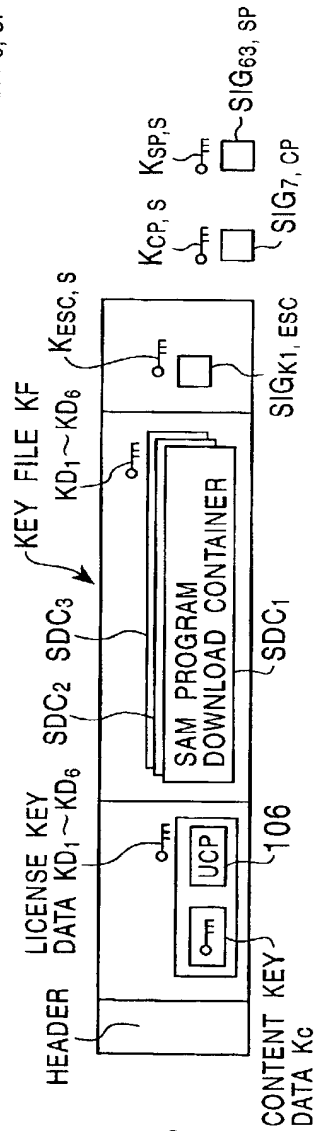


FIG. 84B

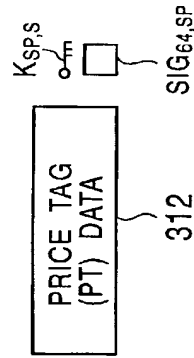


FIG. 84C

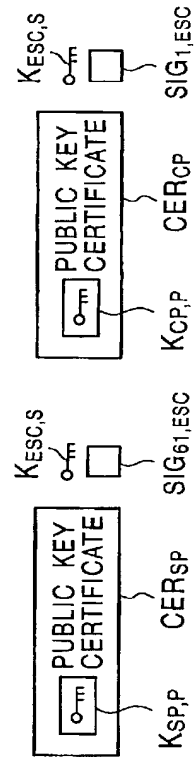


FIG. 84D

FIG. 85

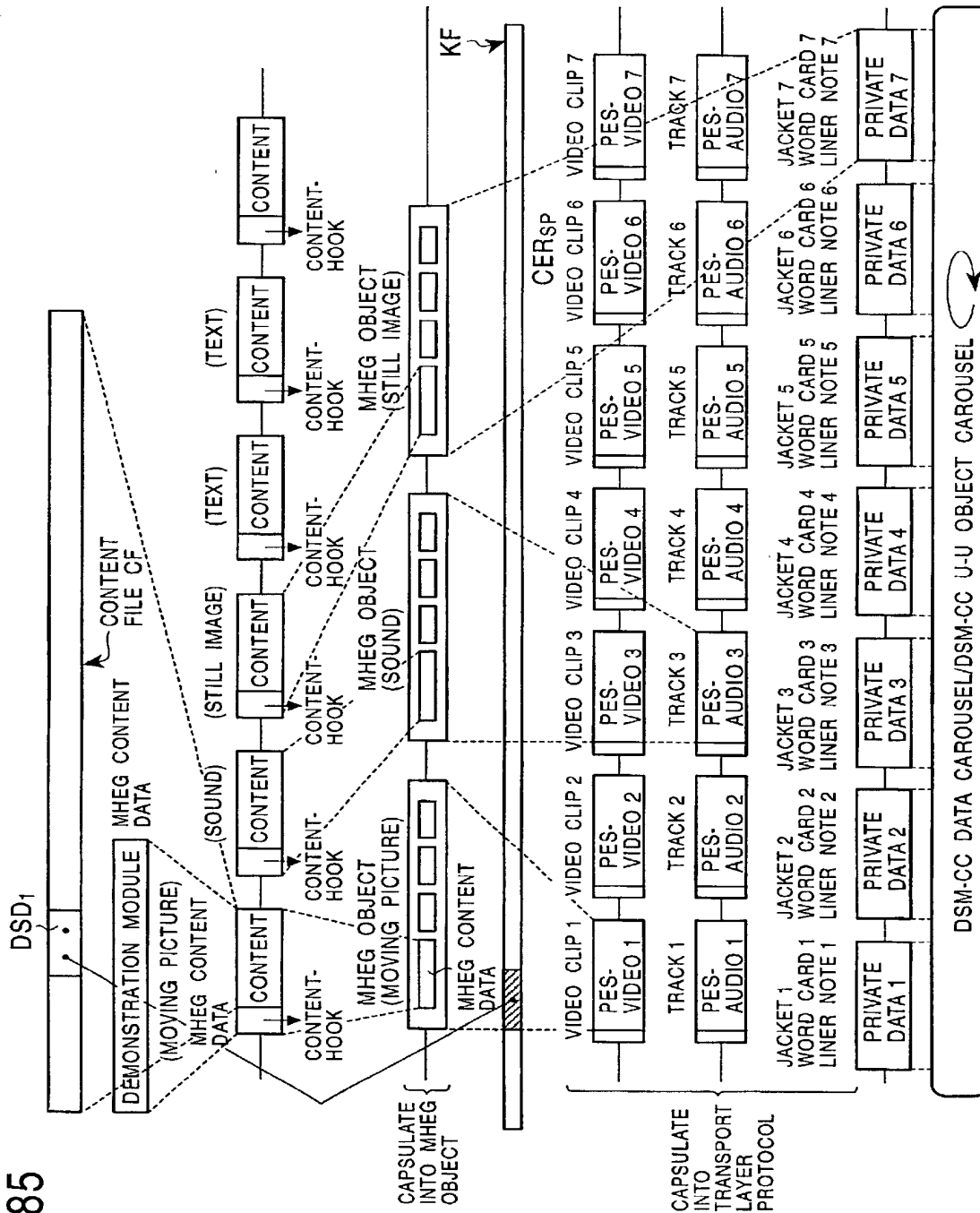
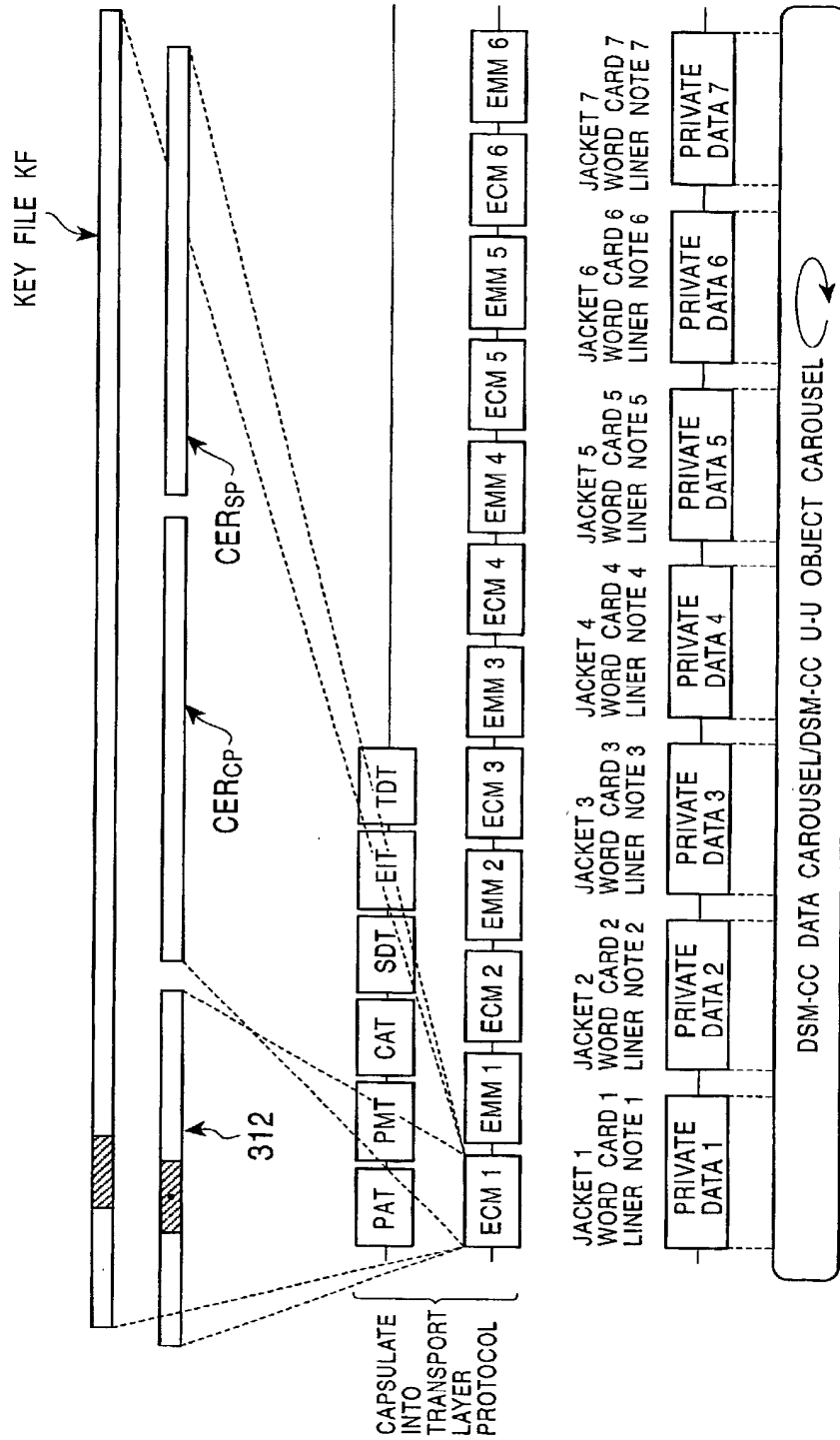


FIG. 86



SUPPLY LICENSE KEY DATA TO
CONTENT PROVIDER AND SAM

ISSUE PUBLIC KEY CERTIFICATE
DATA DER_{CP}, CER_{SP}, CER_{SAM1} ~
CER_{SAM4}

CREATE KEY FILE KF

PERFORM PAYMENT SETTLEMENT
(PROFIT DISTRIBUTION BETWEEN
CP AND SP) BASED ON USAGE
LOG DATA

FIG. 88

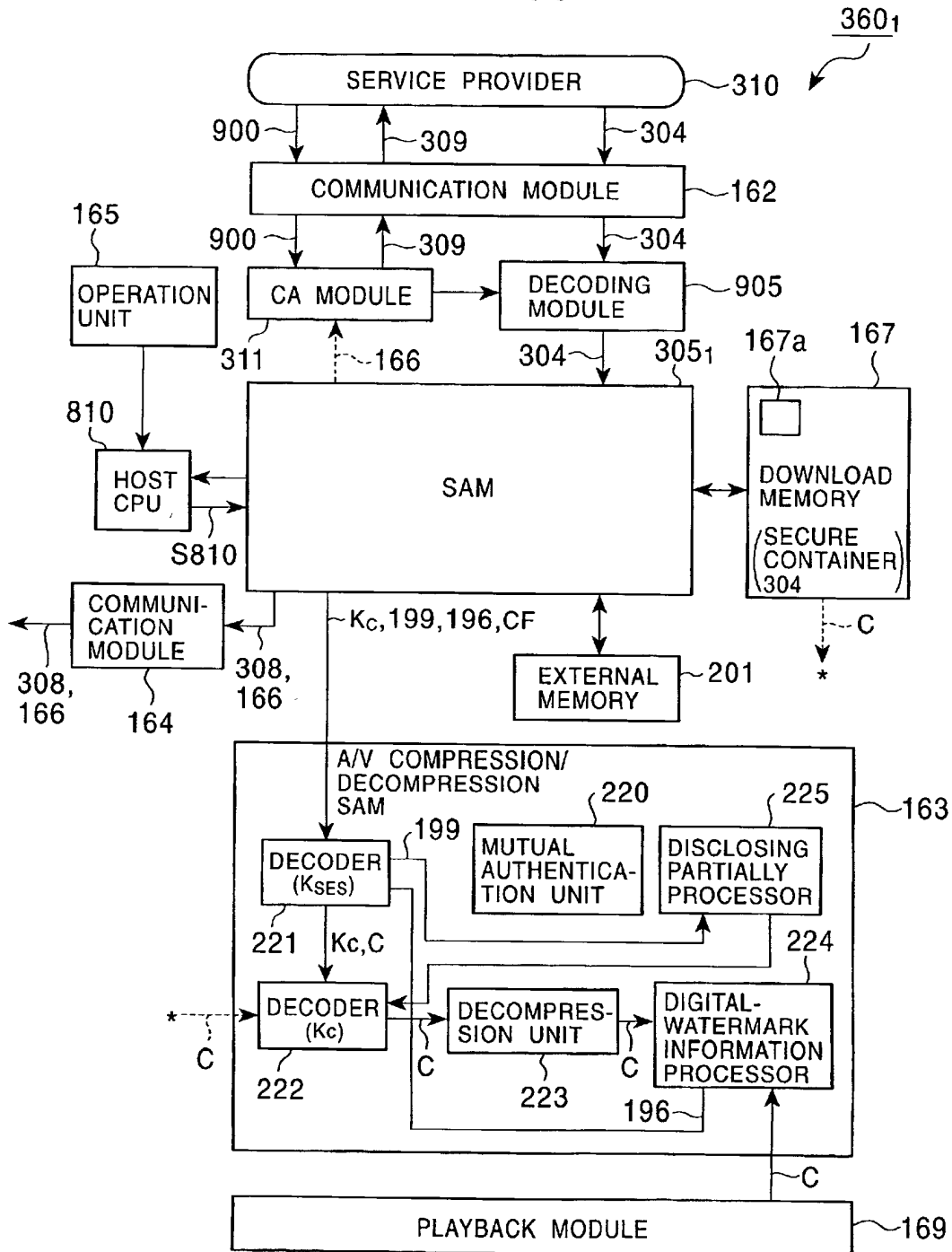


FIG. 89

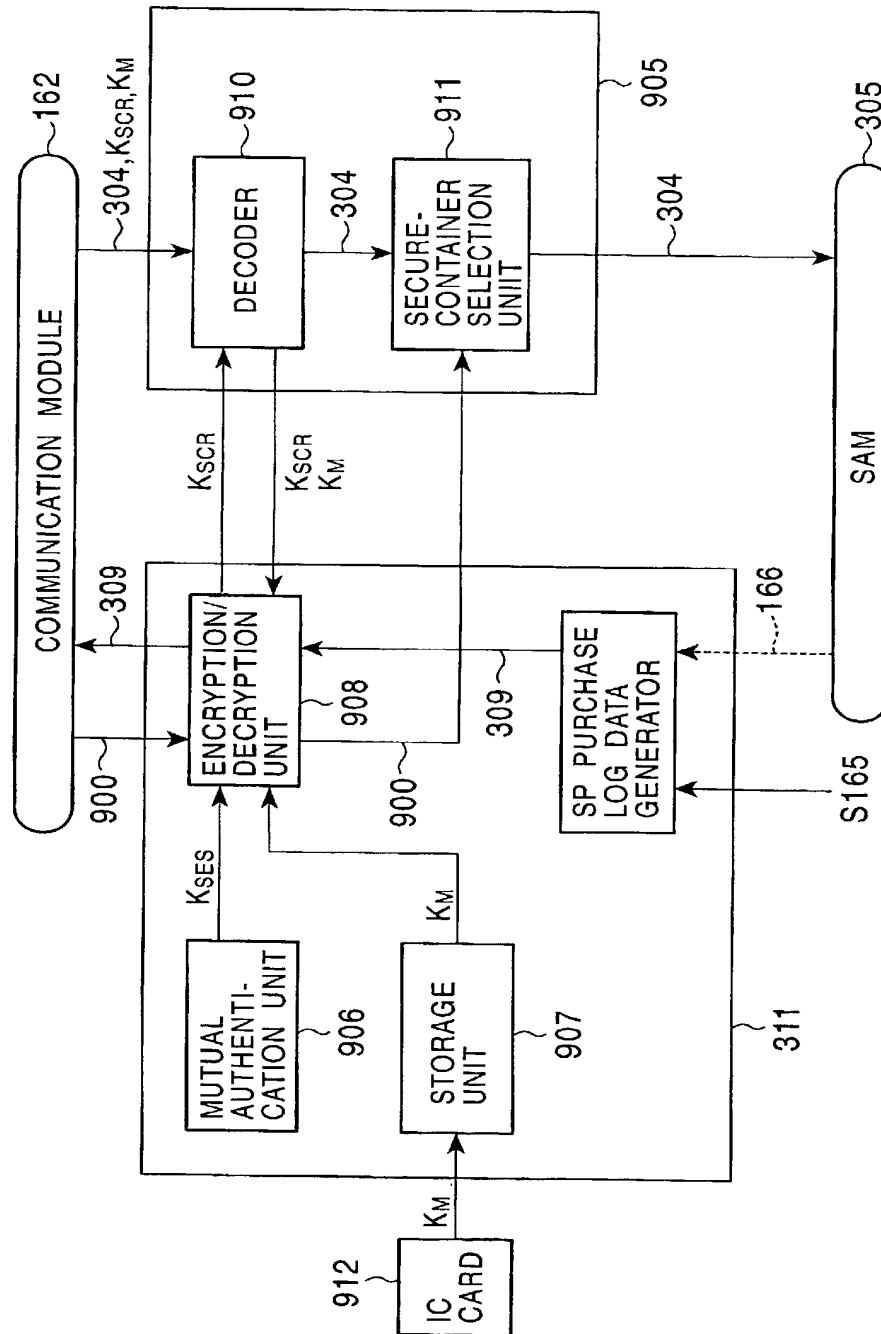


FIG. 90

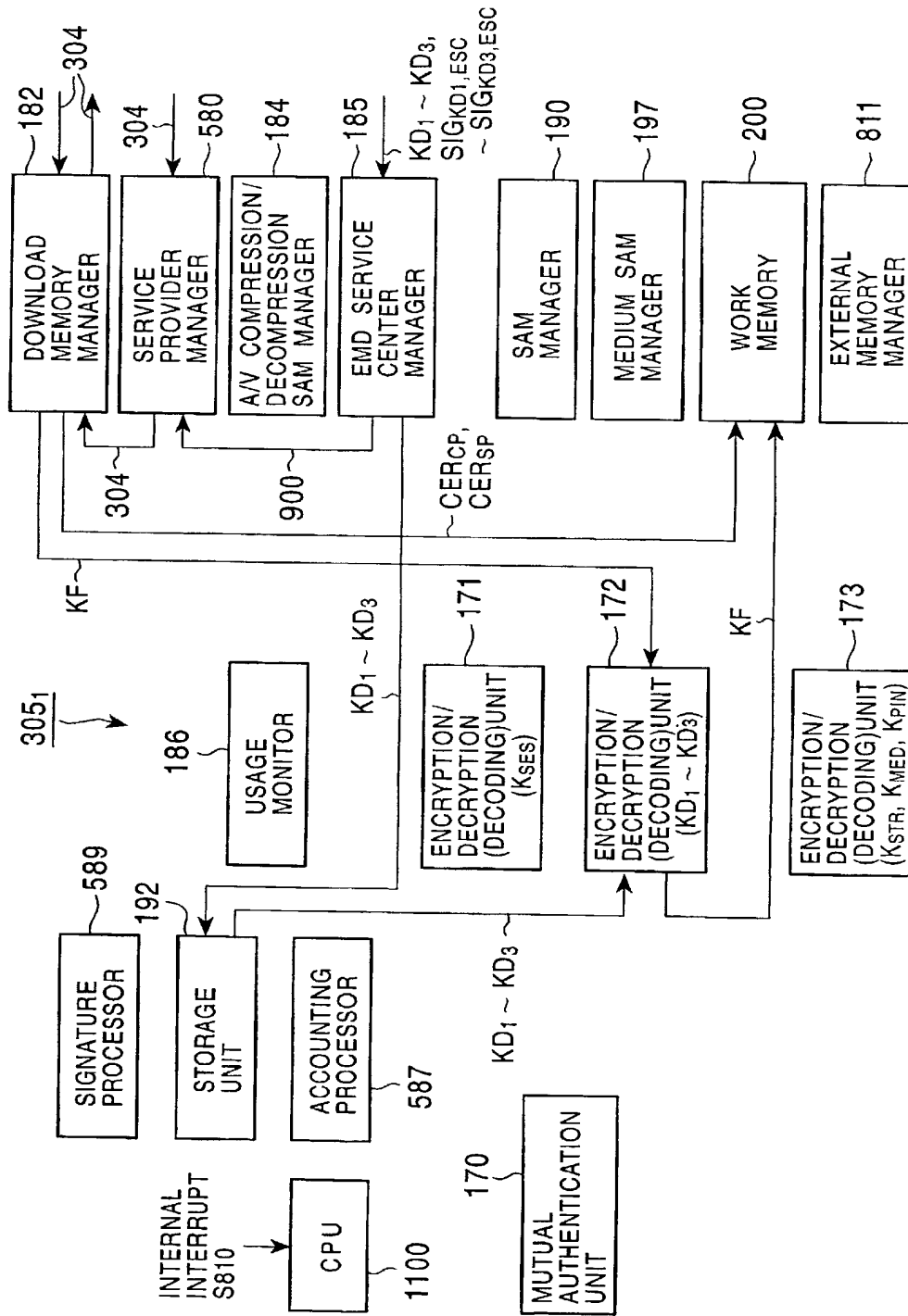


FIG. 91

CONTENT KEY DATA K_c

UCP DATA 106

LOCK KEY DATA K_{Loc} OF NON-VOLATILE MEMORY 201

PUBLIC-KEY CERTIFICATE DATA CER_{CP} OF CONTENT
PROVIDER 301

PUBLIC-KEY CERTIFICATE DATA OF CER_{SP} OF SERVICE
PROVIDER 301

UCS DATA 166

SAM PROGRAM DOWNLOAD CONTAINERS $SD_1 \sim SD_3$

PRICE TAG DATA 312

FIG. 92

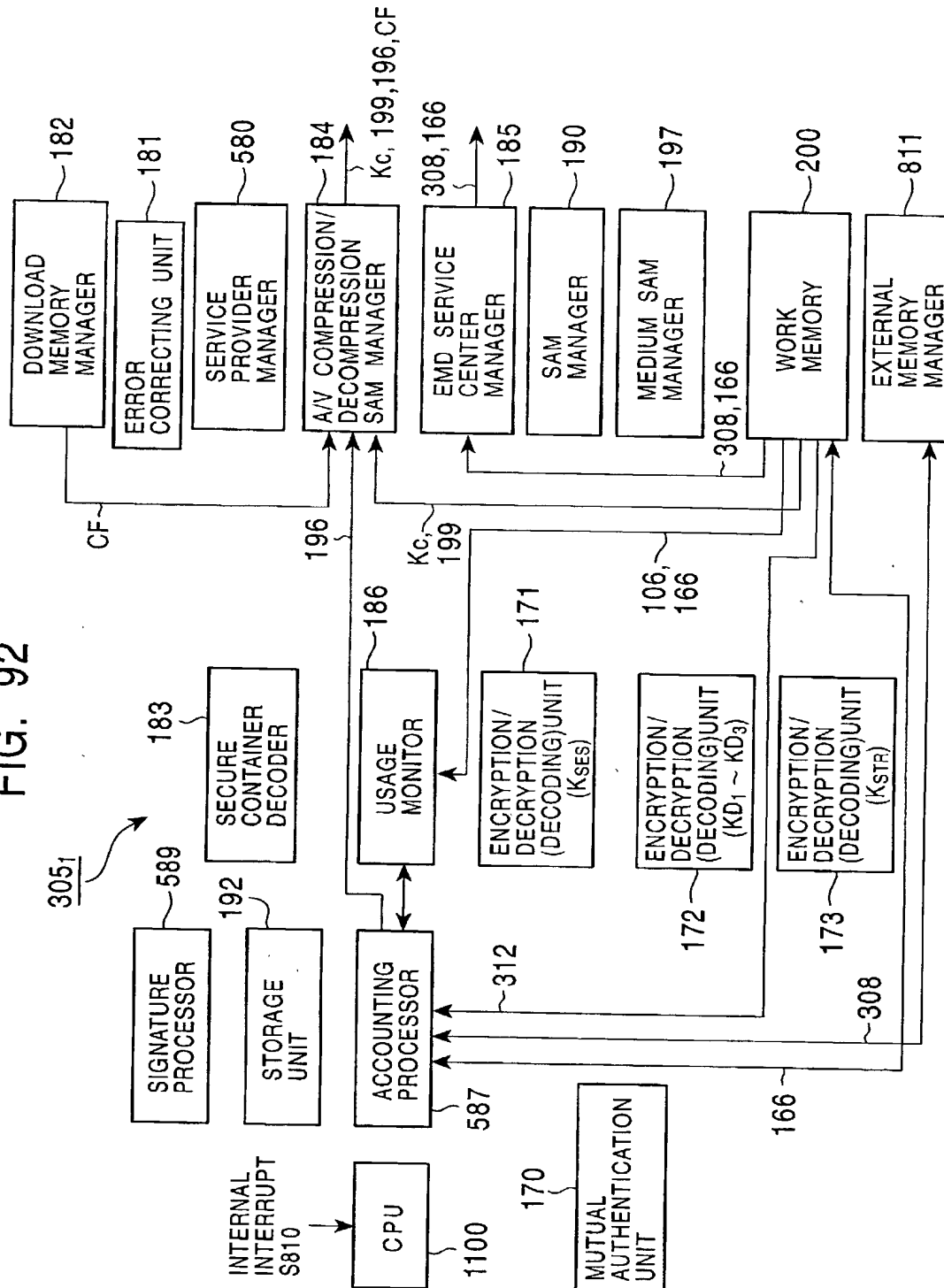


FIG. 93

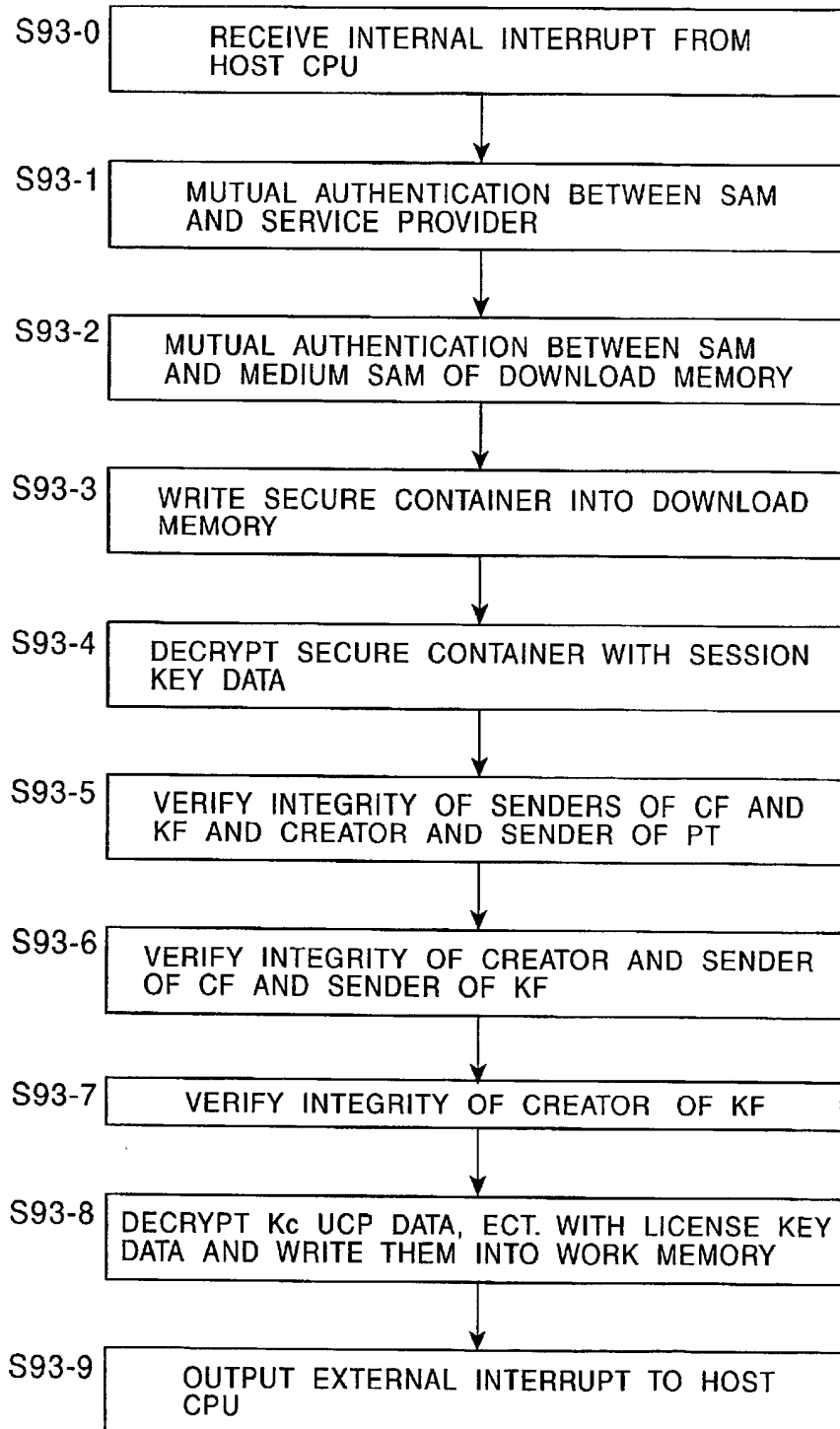


FIG. 94

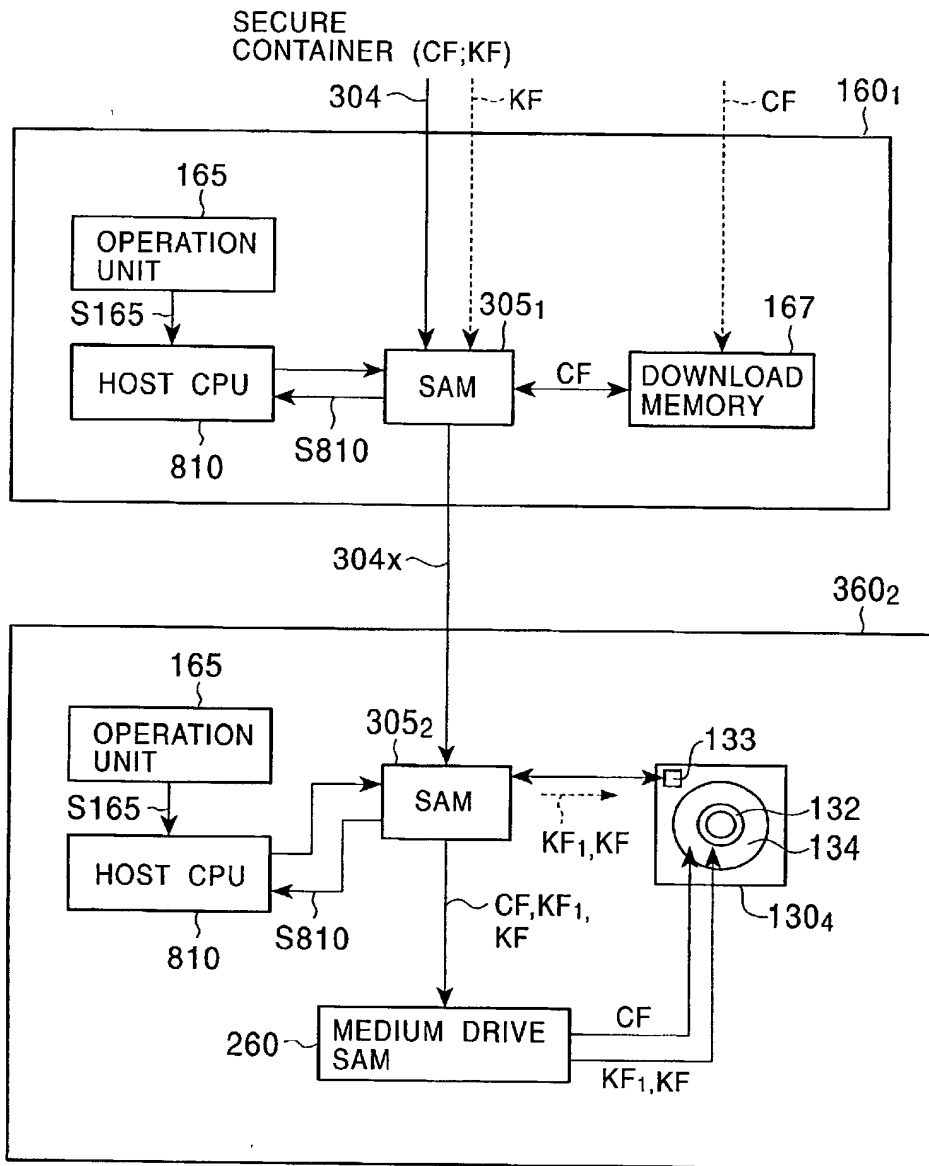


FIG. 95

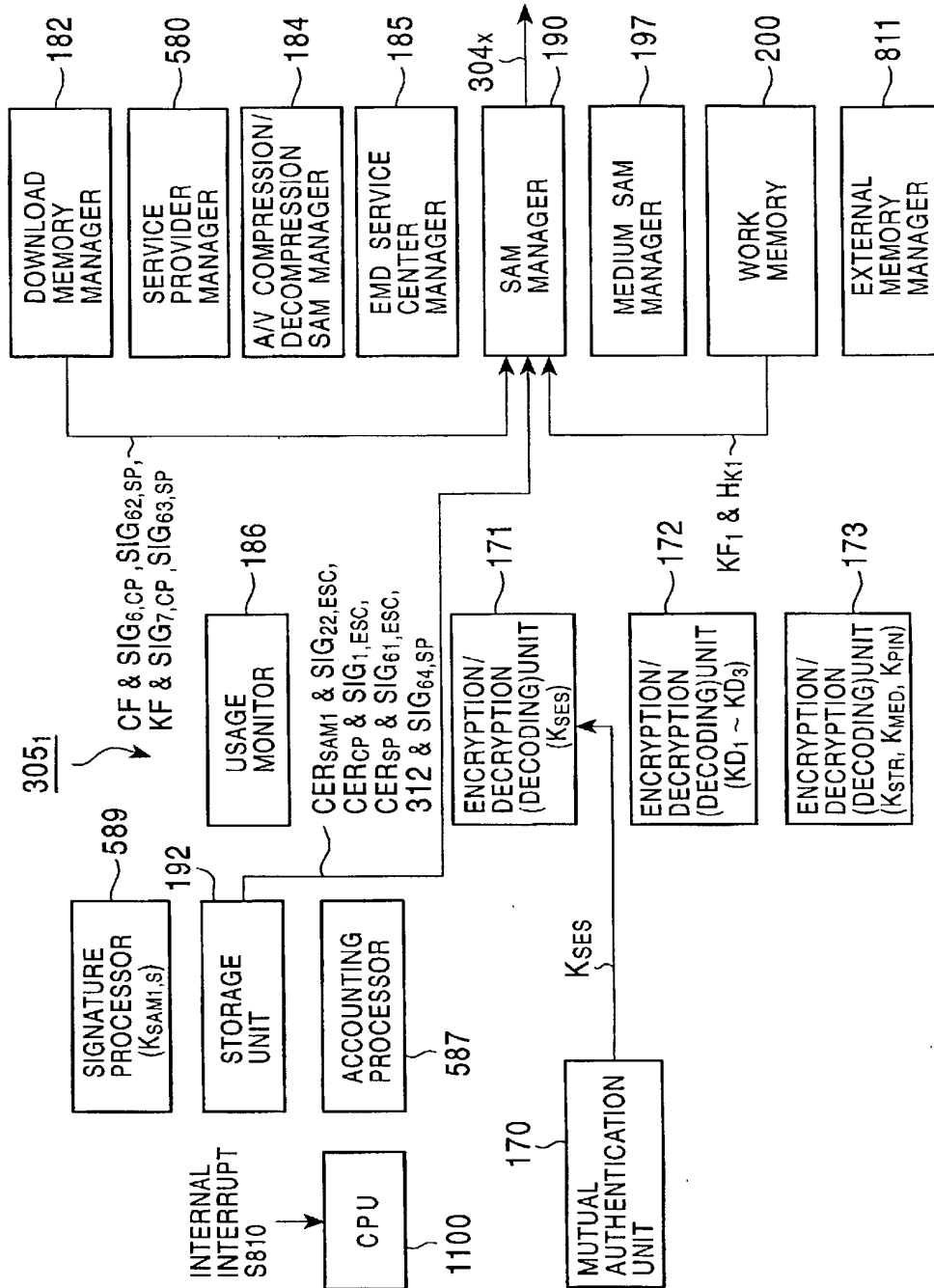


FIG. 96

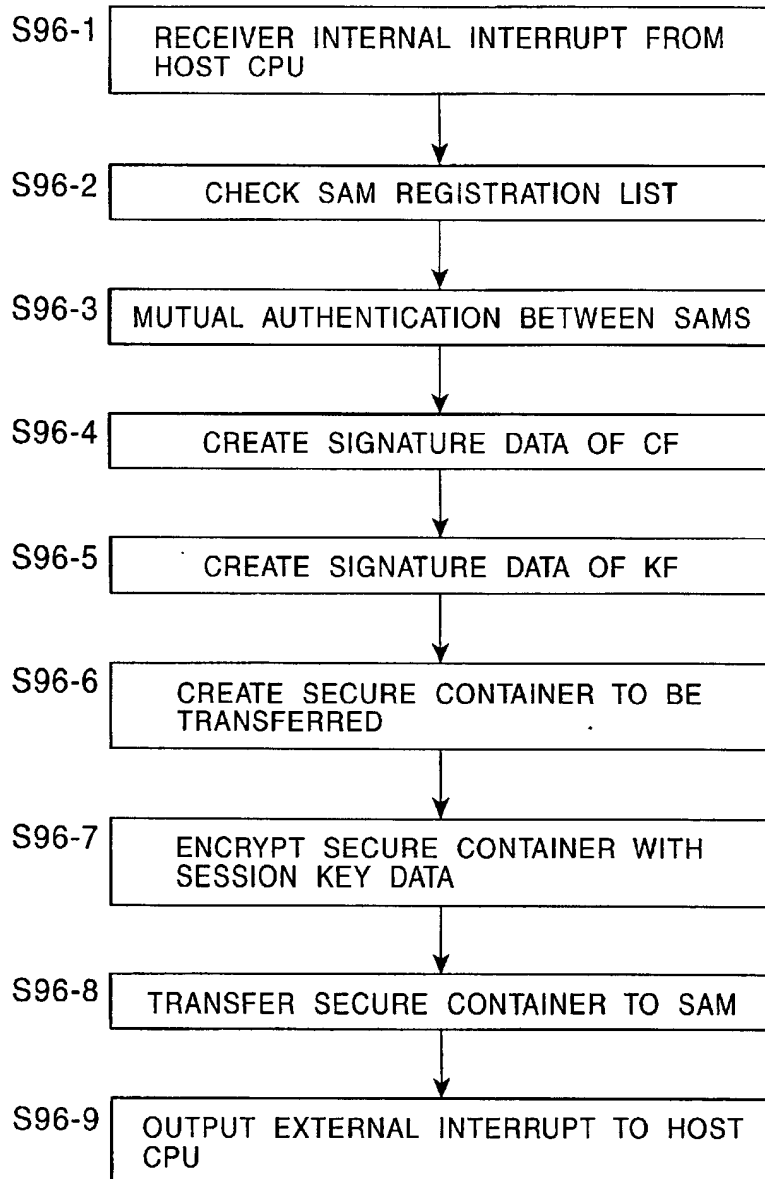


FIG. 97A

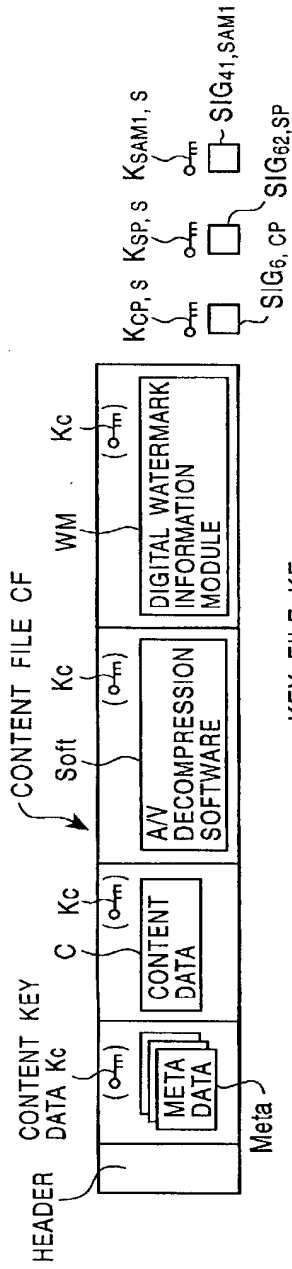


FIG. 97A

FIG. 97B

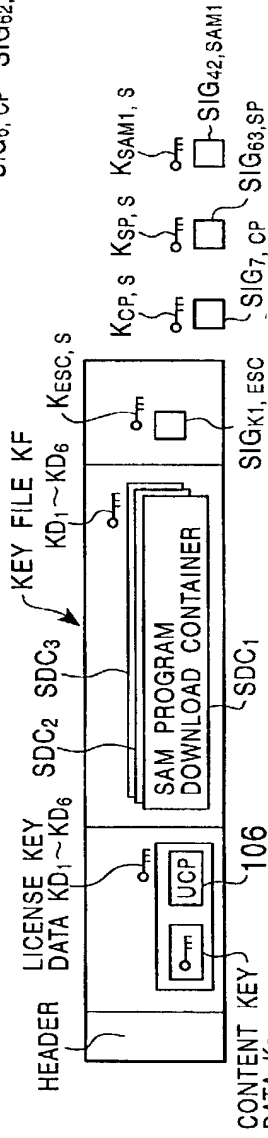


FIG. 97C

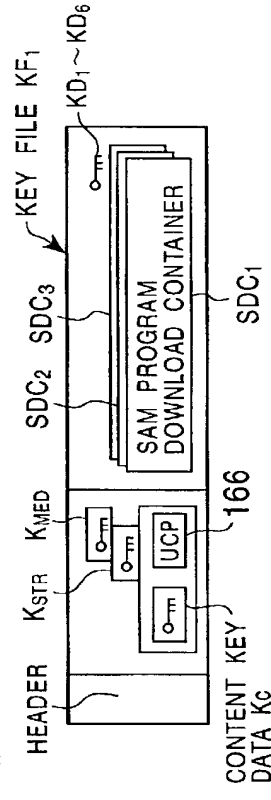


FIG. 97D

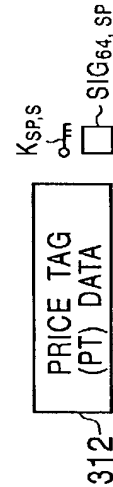


FIG. 97E

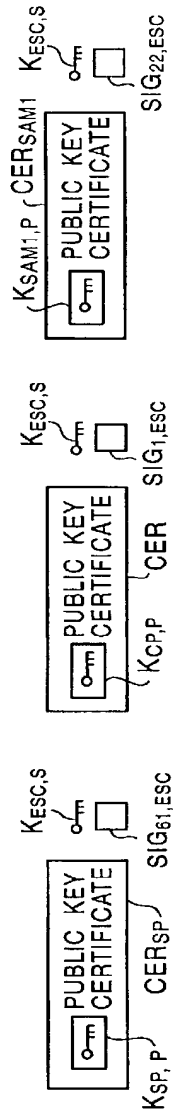


FIG. 99

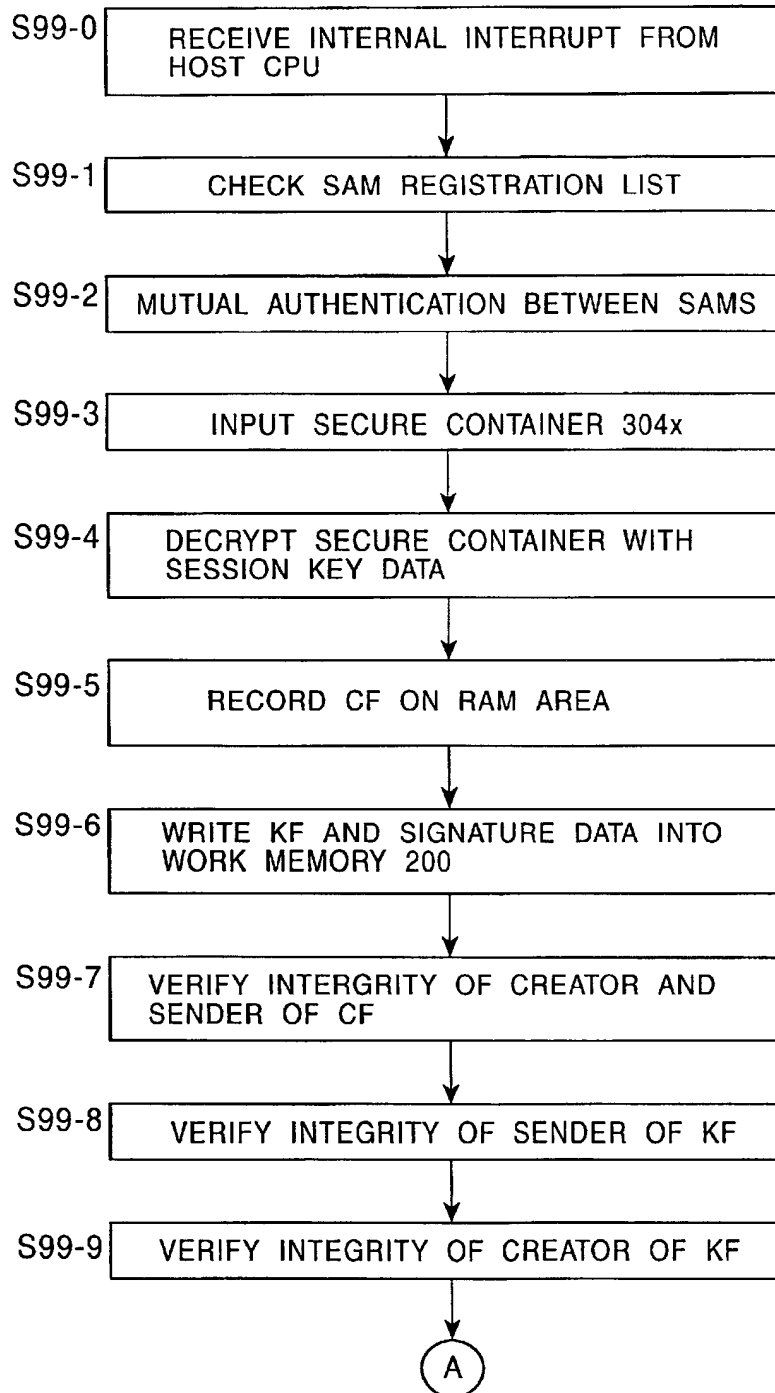


FIG. 100

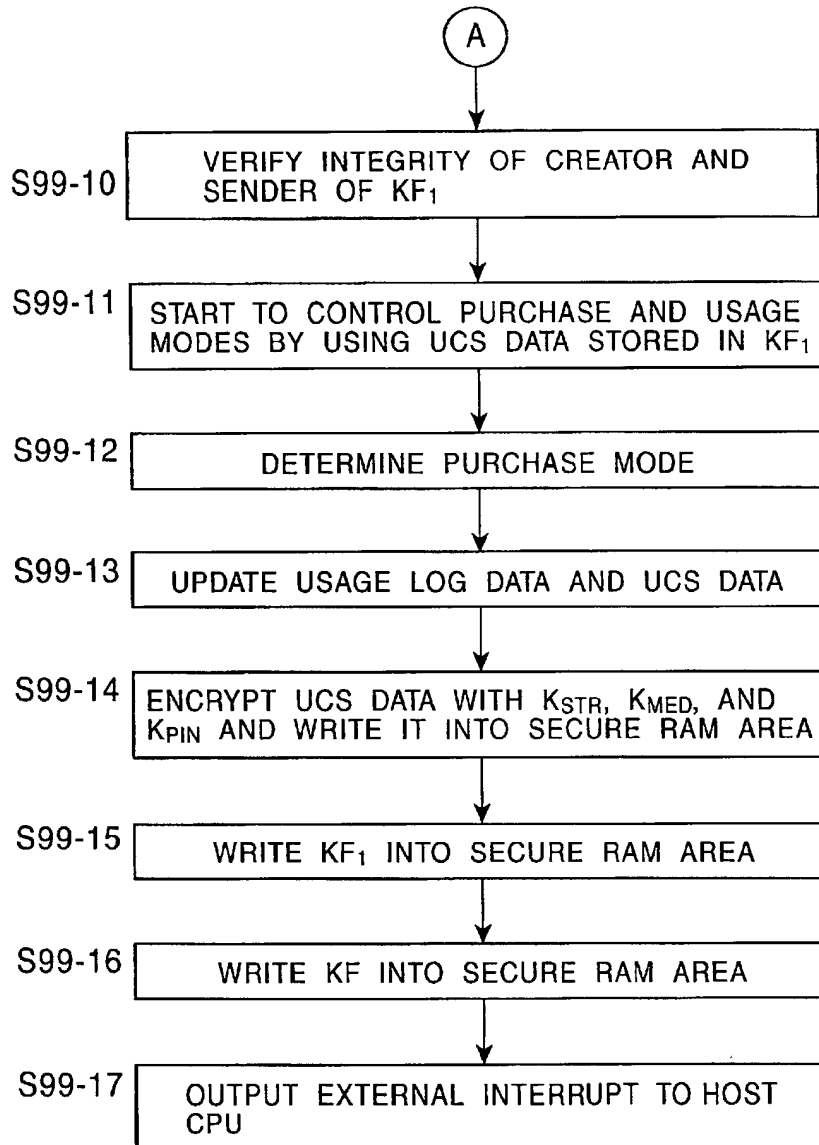


FIG. 101

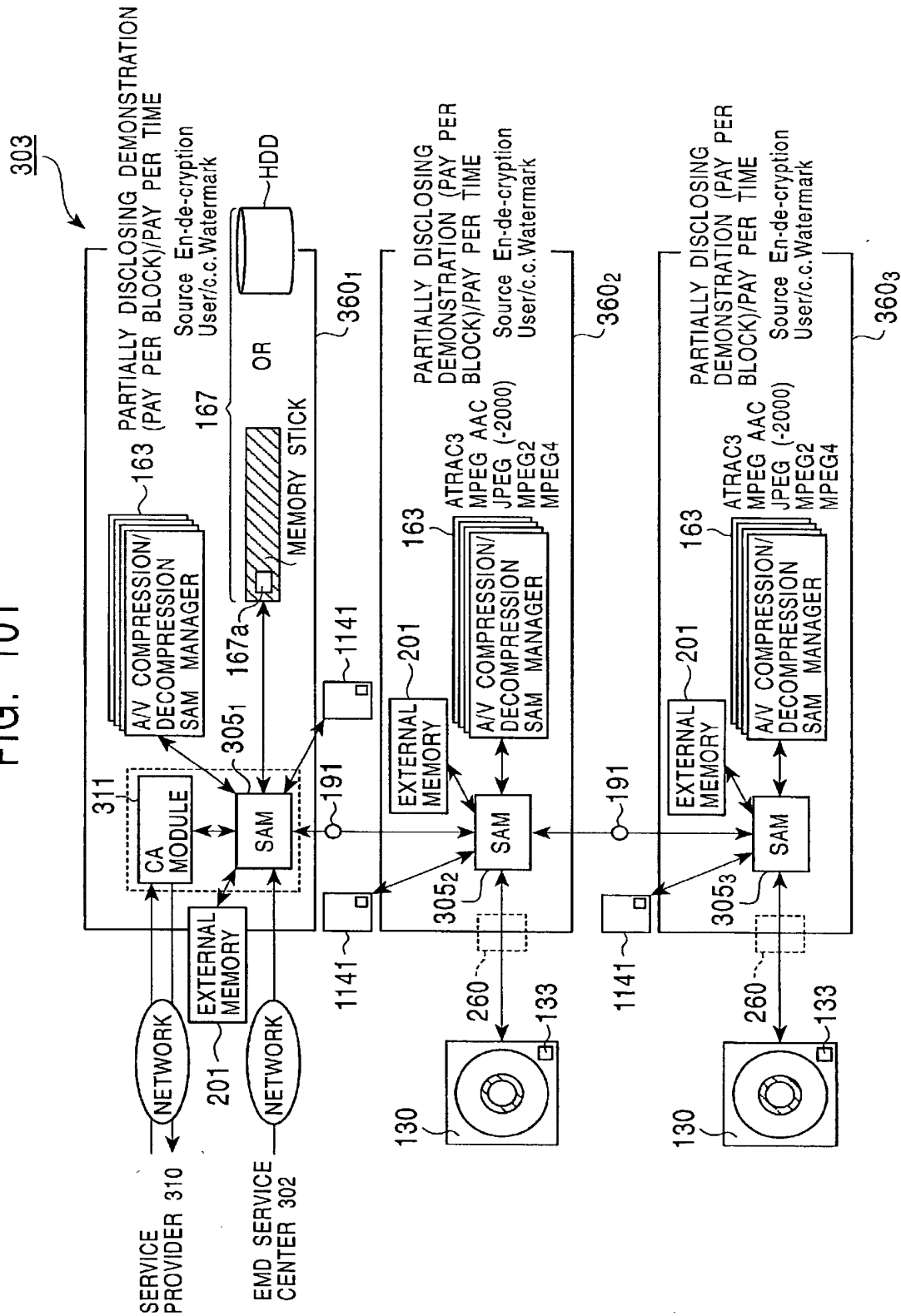


FIG. 102

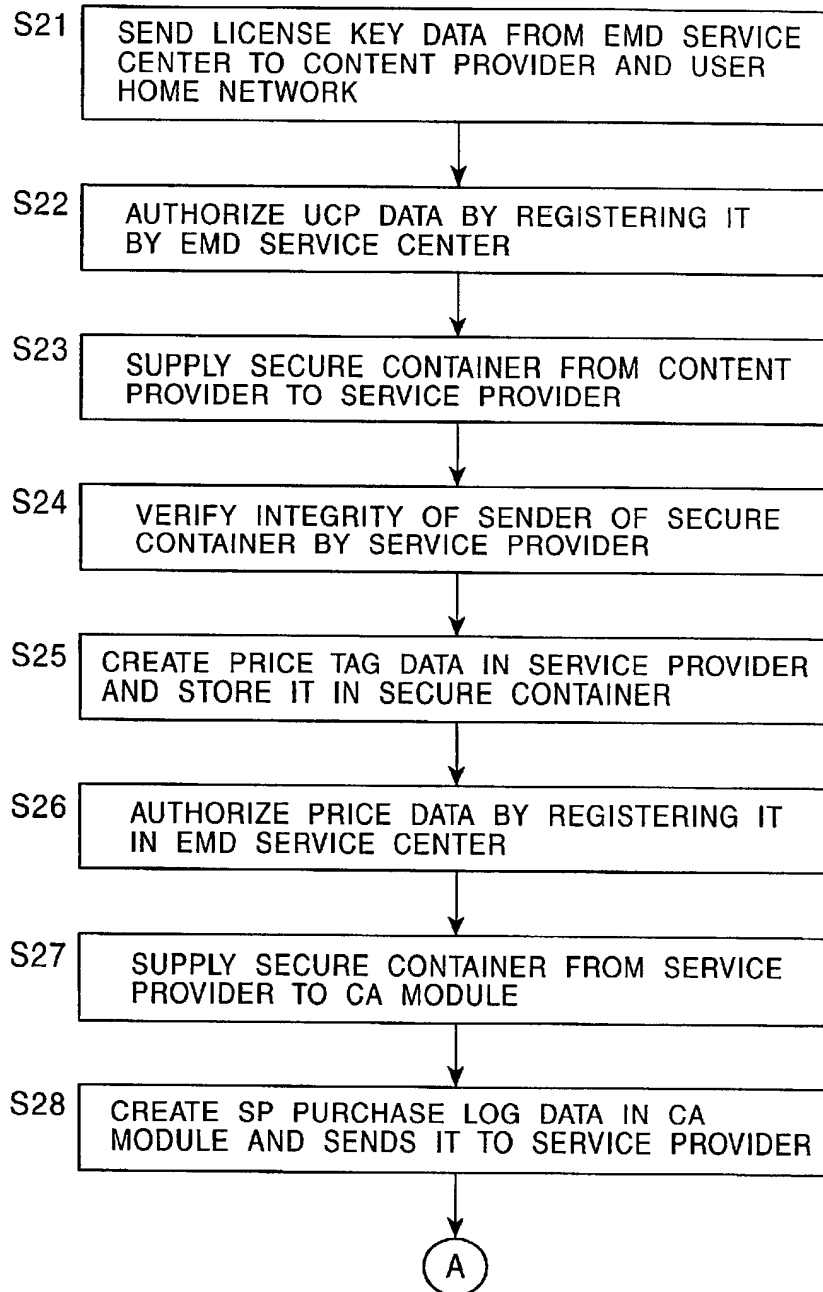


FIG. 103

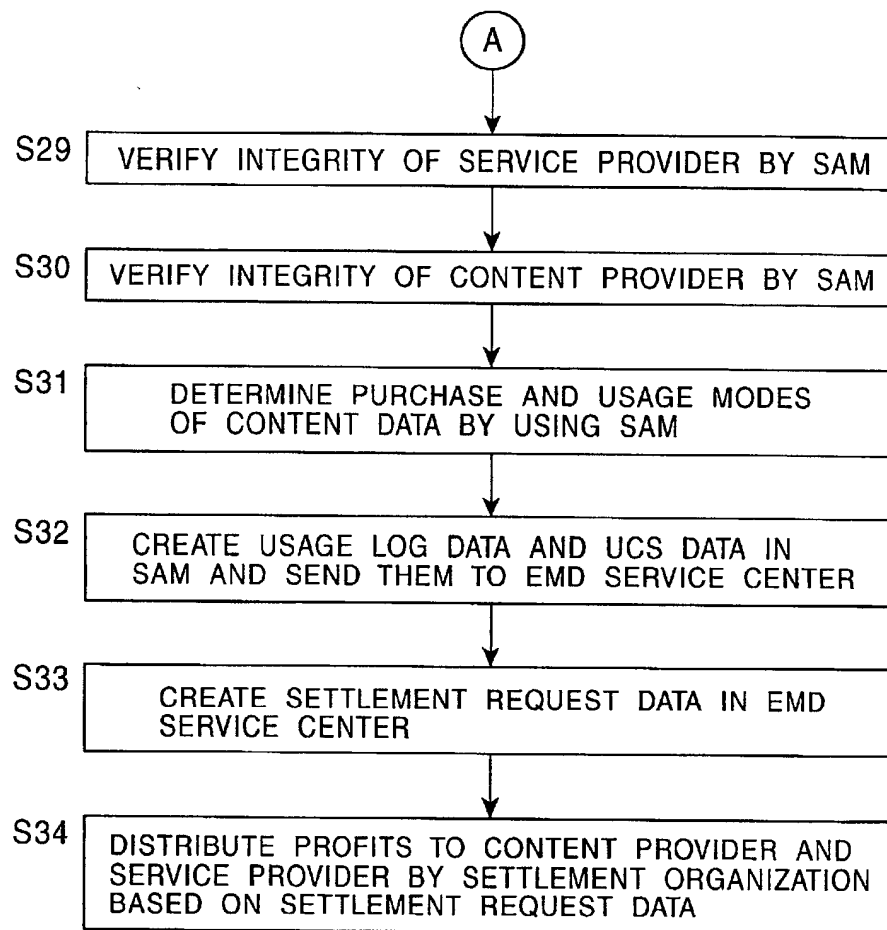


FIG. 104

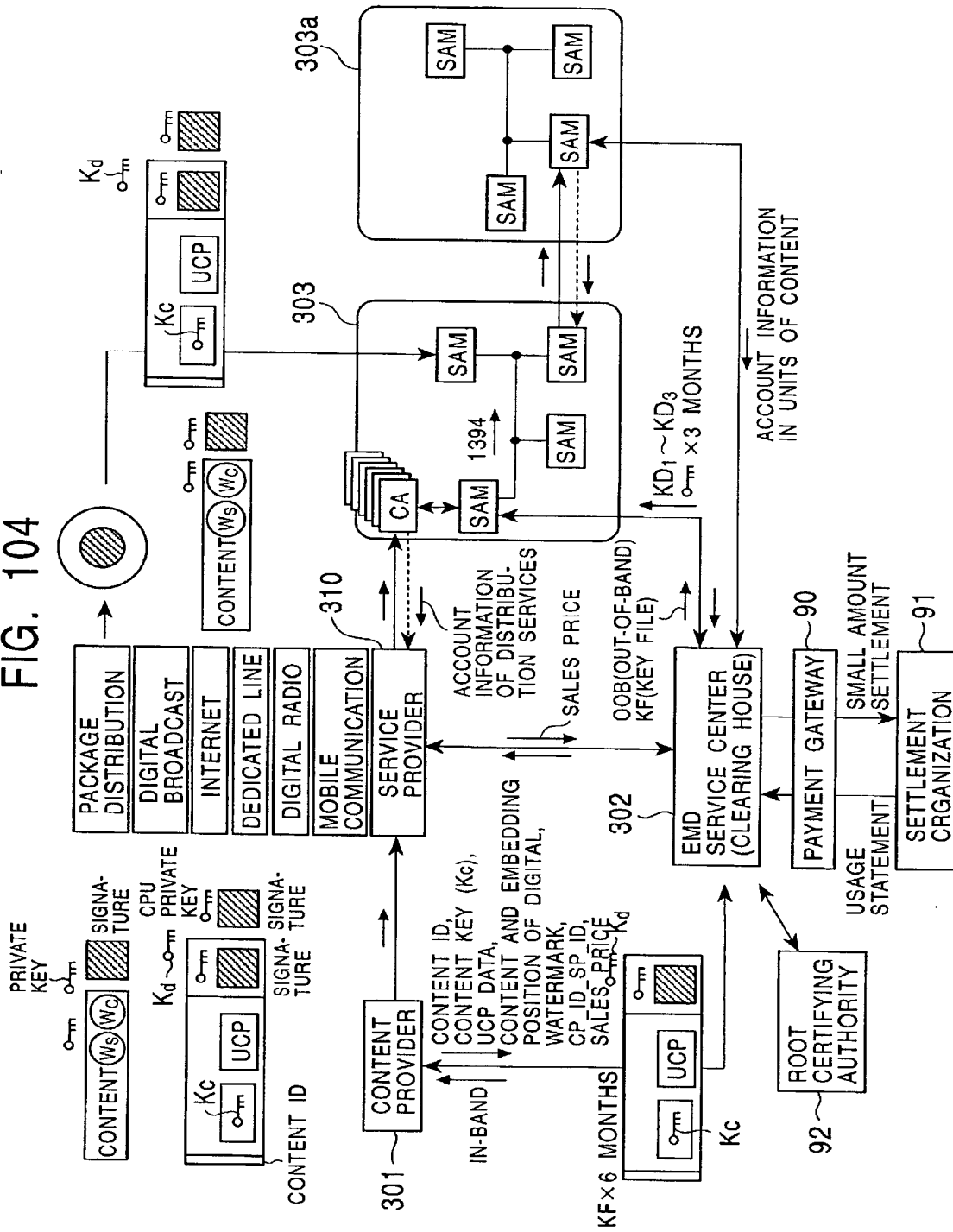


FIG. 105

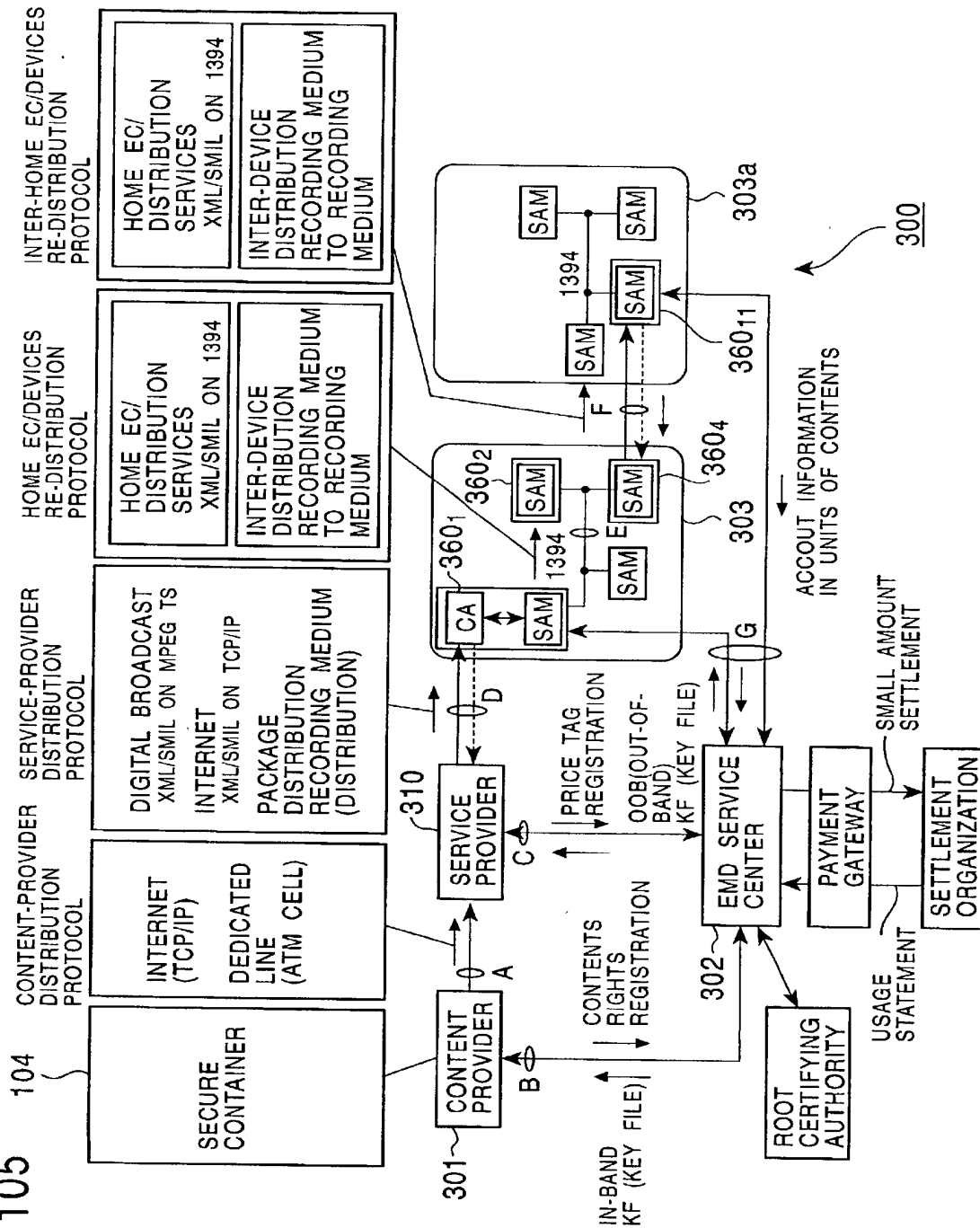


FIG. 106

